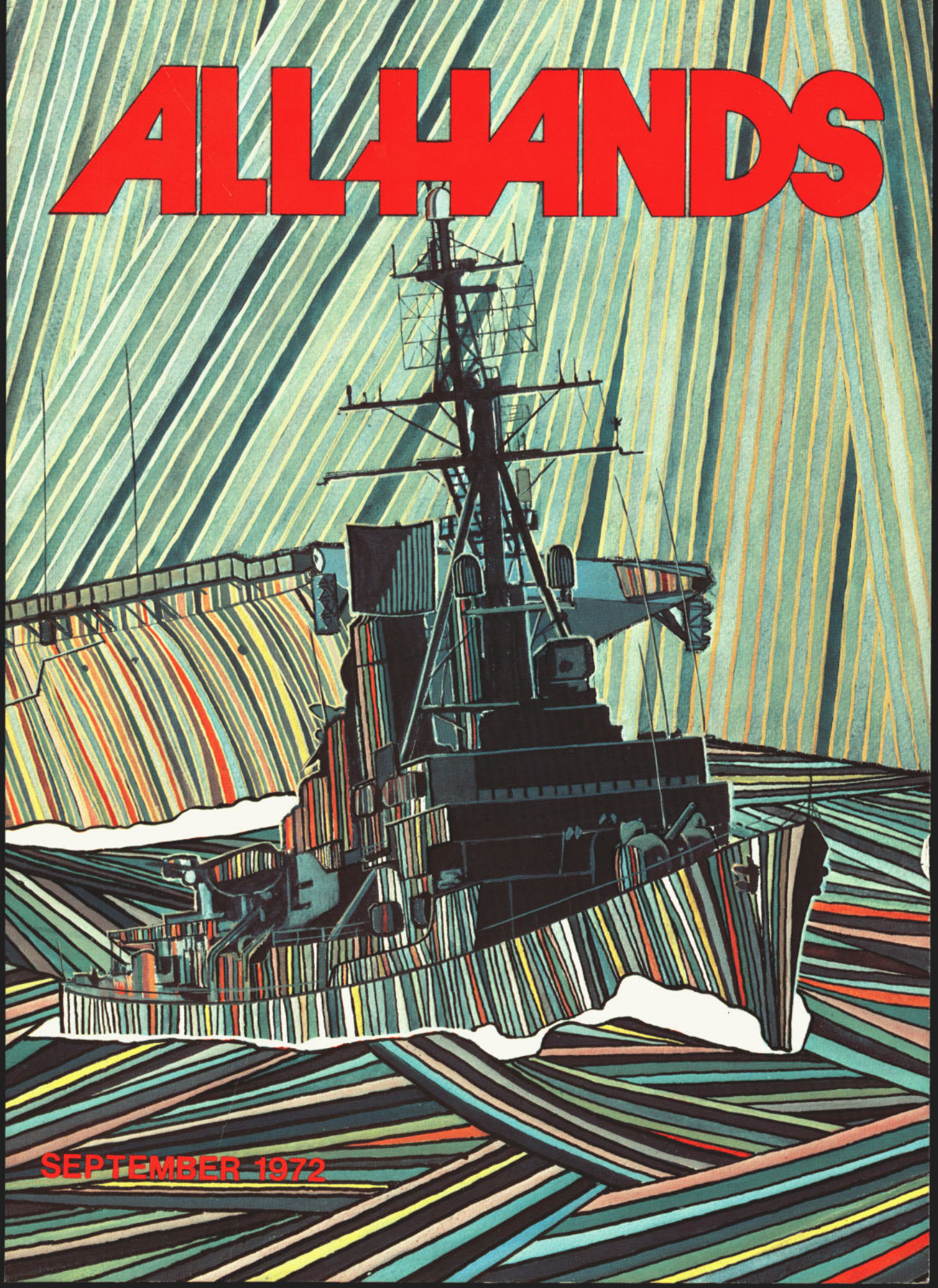
ALL HANDS



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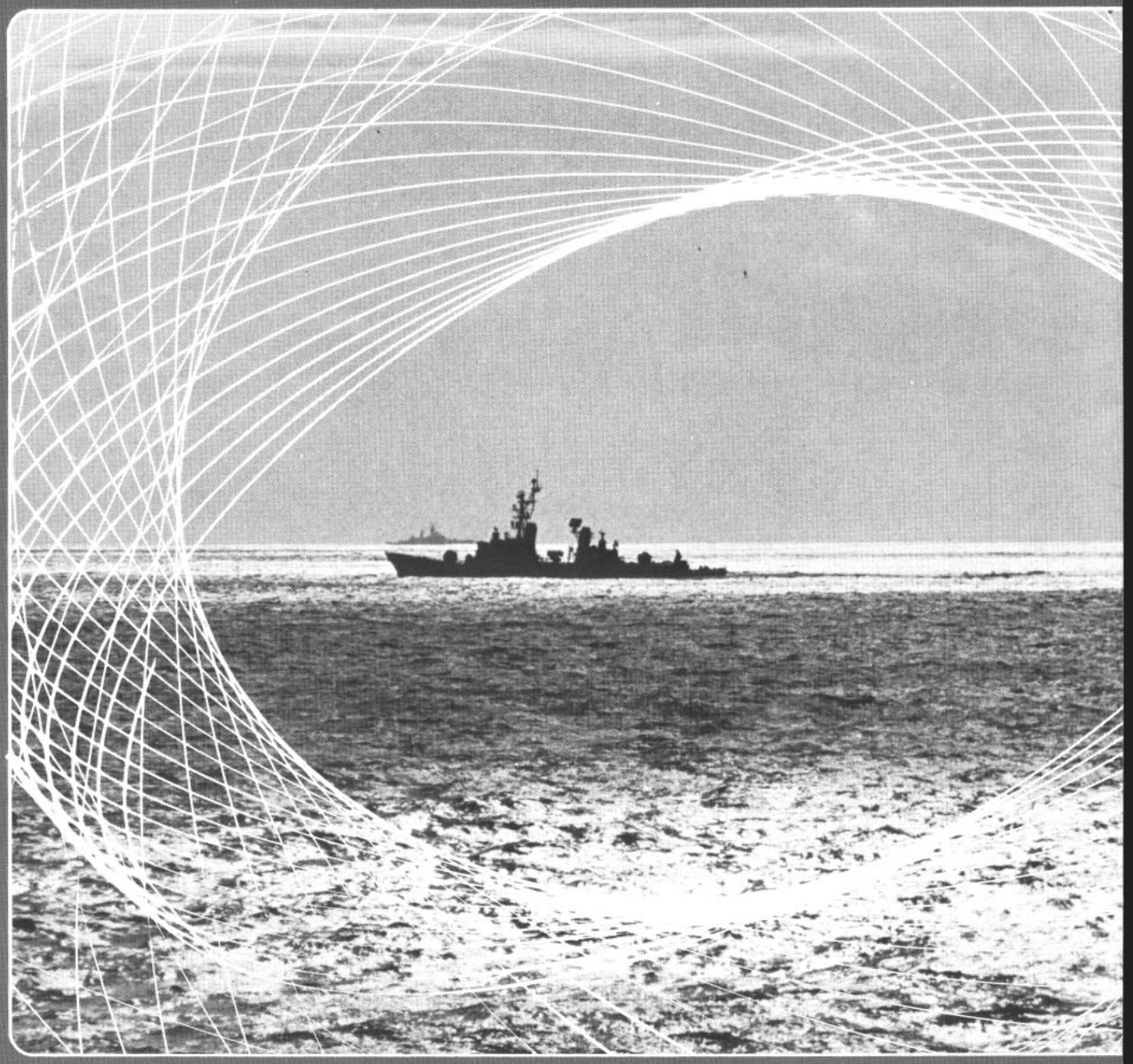

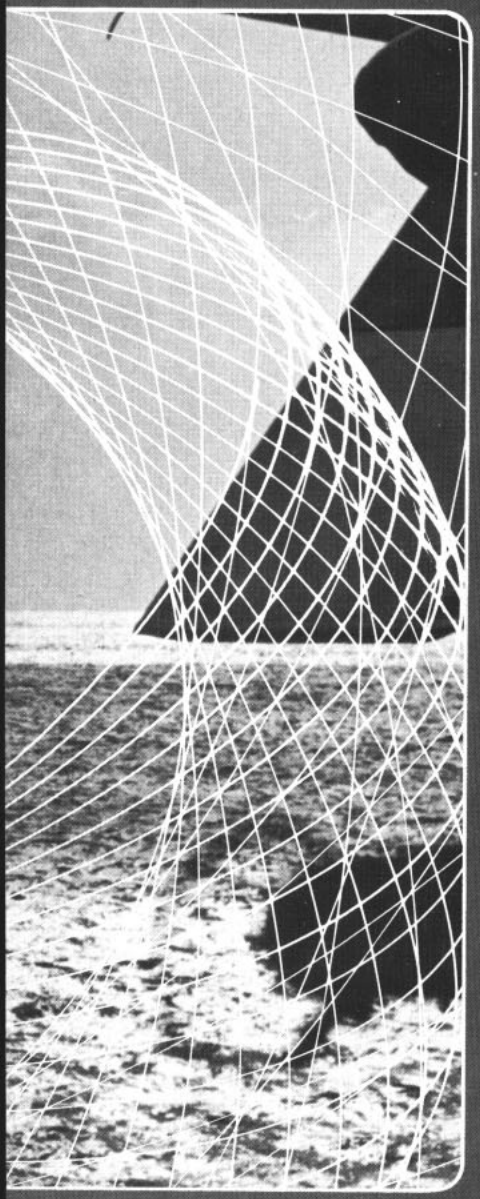

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

SEPTEMBER 1972 Nav-Pers-O NUMBER 668

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• **AT LEFT: USS Richard E. Byrd (DDG-23) patrolling the high seas. The modernistic photo overlay was derived from a photo taken by PH2 Dominick R. Barletta.**

• **FRONT COVER: MAN AND MODERN SCIENCE on the ancient seas is really representative of the spirit of today's up-to-date Navy. Fantastic new inventions coupled with superior education and training have made our Navy the greatest the world has ever known. Cover design by staff artist Michael D. Tuffli.**

OUR NUCLEAR SURFACE NAVY

USS NIMITZ (CVAN 68) is the biggest, fastest, most powerful and mighty of all the Navy's warships. When she slid into the water earlier this year, she displaced approximately 95,000 tons. They don't measure her in feet—they use football fields (approximately three and a half).

USS *Bainbridge* (DLGN 25) completed her initial sea trials almost 10 years ago. She steamed 570 miles and met all of her trial requirements including design full power—all on less than five ounces of uranium fuel.

A large oil spill occurred in the port of Rio de Janeiro, Brazil, some years ago when USS *Truxtun* (DLGN 35) was tied up there during a port visit. One thing that the authorities were sure about then, and now, is that the oil didn't come from *Truxtun*.

These and other assorted minor miracles have a common root in what is one of the fastest growing areas in today's Navy—surface nuclear power. They illustrate just a few of the amazing and important uses to which nuclear power can be applied. That's why the Navy has committed itself to a larger nuclear force, a force that will almost triple the number of such ships by 1975.

Left: An A-4D Skyhawk approaches for landing on USS Enterprise (CVAN 65) with USS Bainbridge (DLGN 25) and USS Long Beach (CGN 9) in the background. This was Operation Sea Orbit, a nonstop around-the-world cruise made by the three nuclear ships in 1964.

A LARGER NUMBER OF SHIPS means a greater number of men involved with nuclear power. But the men who board a nuclear surface ship are no ordinary sailors. They are among the most highly trained in the Navy, and this training—and the incentives for service—promises to be even better in the future.

The ideas and advantages of nuclear power are fairly simple, but up until now, most people have associated them only with the submarine force. In a Chief of Naval Operations' memorandum to the Secretary of the Navy in 1966, these concepts for the surface navy were succinctly outlined—nuclear power provides ships:

- Almost unlimited endurance at high speeds. This results in increased flexibility, an ability to obtain ammunition, aviation fuel, and other supplies from remote places in a minimum amount of time, and an attack ability in a much greater area.
- Reduced vulnerability. Nuclear ships need not remain exposed as long as non-nuclear vessels during replenishment. They can maneuver better to avoid

Right: A low altitude, bow view of USS Enterprise (CVAN 65) shows the kind of load this nuclear ship carries. Center: USS Nimitz (CVAN 68) prepares for launching earlier this year.

attack. The ships can be more easily and effectively sealed against nuclear, biological and chemical attack.

• Reduced dependence on logistic support. Nuclear ships require fewer mobile forces.

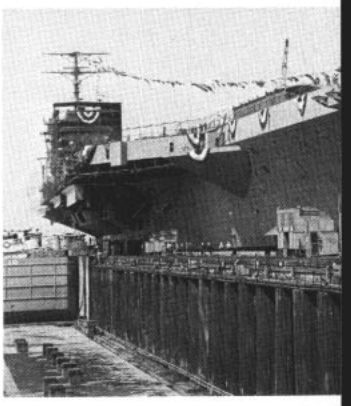
• Greater attack effectiveness. Nuclear ships can remain in battle areas for a greater length of time and have a greater ability to exploit weather conditions to their advantage.

• Reduced maintenance. The absence of corrosive stack gases cuts down on the wear and tear—and a lot of at-sea and in-port repairs.

Because of these advantages, more and more attention is being given to nuclear surface power. Manpower needs will double by 1975, and if the current growth rate continues, the number of billets on nuclear surface ships is expected to double again by 1980.

Our Nuclear Surface Navy

THE NAVY has four veteran nuclear surface ships at sea now—*Bainbridge, Truxtun,* USS *Enterprise* (CVAN 65), and USS *Long Beach* (CGN 9). Before the end of the year, three more—*Nimitz,* USS *California* (DLGN 36), and USS *South Carolina* (DLGN 37)—will be manned. Now under construction are the first three nuclear frigates of the DLGN 38 class, plus another giant aircraft carrier, USS *Eisenhower* (CVAN 69).



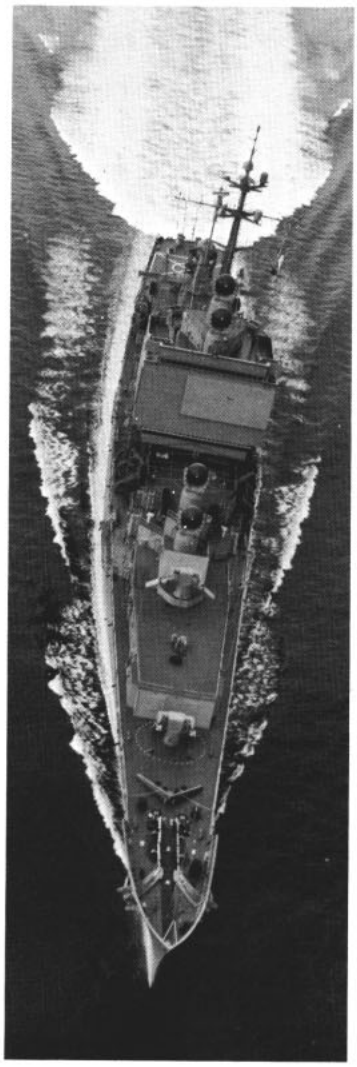
With just four ships in the water, the Navy has built up quite a tradition in nuclear sailing. Launched in 1959, *Long Beach* was the world's first nuclear surface warship and the first U. S. cruiser to be built from the keel up since World War II. She was impressive with her seakeeping ability, as well as her size. She is 721 feet long and displaces 17,350 tons.

Long Beach was part of the Second Fleet in the Atlantic until 1963 when she joined the Sixth Fleet in the Mediterranean. She went through a six-month overhaul in 1965 and was assigned to the Pacific Fleet in 1966. She is now on her fourth deployment to Southeast Asia.

Bainbridge rolled into the water in 1962. Assigned to the Sixth Fleet, she carried an impressive array of guns, missiles, and antisubmarine warfare equipment. In 1965 she was assigned to the Pacific Fleet, where she has made five separate deployments to the combat zone in Southeast Asia.

WITH THE APPARENT SUCCESS of the Navy's first nuclear surface ships, Congress—on its own initiative—authorized extra funds for fiscal year 1962 for the building of *Truxtun*. Two years later she was launched as a sister ship to *Bainbridge*. She, too, dis-

Left: A deck view of the carrier USS Enterprise (CVAN 65), taken 10 years ago. She was the Navy's first nuclear carrier.



Left: USS Long Beach (CGN 9) was the world's first surface nuclear ship. She was launched in 1959 and was also the first cruiser to be built from the keel up since World War II.

placed approximately 9000 tons, spanned 564 feet in length, and carried a variety of anti-war and anti-submarine weapons. On one of her first cruises, she sailed around the coast of South America where she amazed officials of several Latin countries with her speed, agility, and ability to remain at sea.

Enterprise has for many years been the pride of the Navy's carrier fleet. She was initially most impressive by her size. Her height equaled a 23-story building; her flight deck covered 4.47 acres. Her overall length was greater than 1000 feet; her crew numbers 5000 men. Her horsepower count was in excess of 200,000. In her first four years of operation as part of the Sixth Fleet, she sailed more than 207,000 miles and conducted more than 42,000 aircraft landings.

SHE JOINED the Seventh Fleet in 1965 and in 1969 she returned to Hampton Roads, Va., for refueling and overhaul. Her new cores contain all the energy you could put in a continuous train of tank cars stretching from Washington to Boston, and now she has enough fuel to last for the next 10 to 13 years.

Enterprise, Long Beach and *Bainbridge* got together in the summer of 1964 to form Task Force One and to carry out Operation Sea Orbit—a 65-day, 30,565-mile round-the-world trip without refueling stops or logistic support of any kind. Such an operation was, of course, unprecedented in the entire history of sailing. The voyage took the three around the Cape of Good Hope in Africa, to Asia and Australia, as well as skirting the coast of Antarctica. Officials from numerous countries were flown onto the deck of *Enterprise* during the operation, but not once did any of the three ships have to stop for logistic support.

THE NEWEST NUCLEAR CARRIER, *Nimitz,* contains two reactors, each of which can produce about four times the power of an *Enterprise* reactor. She will be able to steam some 13 years without refueling, using nuclear power or the equivalent of 10 million barrels of oil. She can also carry about twice the aviation fuel of a conventional carrier and about 50 per cent more ammunition.

California and *South Carolina* are designed to operate independently or with strike, antisubmarine, or amphibious forces. They provide fast, extended range protection for nuclear attack carriers. Armed with two five-inch, .54-caliber dual-purpose guns, two *Tartar* surface-to-air missile launchers, along with *Asroc,* they have a normal crew of some 500 men.

By 1975, there will be some 11 nuclear surface vessels with more on the drawing boards. To man those ships, the Navy will have to fill nearly 250 officer bil-

Left: USS Bainbridge (DLGN 25) is the Navy's second oldest nuclear surface vessel. Her initial cruise used less than five ounces of fuel.

Below: USS Eisenhower (CVAN 69) is now under construction. Center: An artist's conception of USS South Carolina (DLGN 37), another recently launched nuclear ship.

lets and 1630 enlisted billets. Those figures are expected to grow to about 400 officers and 3000 enlisted billets in 1980.

Nuclear trained sailors aren't that easy to come by, however. They are among the most highly and technically trained personnel in the entire fleet; but just because the Navy needs more of them, it doesn't plan to let up on the high standards for their selection.

THE SCHEDULE for an enlisted man entering the Nuclear Field goes something like this: recruit training, class "A" school, temporary assignment awaiting nuclear power school, nuclear power school, operational training (nuclear prototype plant), and sea duty assignment. (For submarines, there is a submarine school immediately before the sea duty.)

Out of boot camp, a nuclear field candidate is assigned to an "A" school for one of four ratings—MM, EM, IC, or ET. Those who make it and remain eligible for the nuclear program are automatically advanced to third class petty officer.

Because of the graduating schedule of Nuclear Power Training, some "A" school graduates may wait up to six months before entering nuclear power school. During this time they are assigned to sea or shore stations where their training can be used. Most candidates receive assignments within about three months.

Nuclear Power Training is divided into two basic courses—Basic Nuclear Power School and the Nuclear Propulsion Plant Operators Course. The Nuclear Power Schools, located in Bainbridge, Md., and Mare Island, Calif., offer a 24-week course covering subjects such as mathematics, physics, reactor principles, thermodynamics, nuclear power plant technology, radiological controls, electrical theory and engineering materials. The pace here is fast, and most of the courses are presented at college levels.

GRADUATING CANDIDATES are then sent to one of three Nuclear Power Training Units located in Windsor, Conn., Schenectady, N. Y., or Idaho Falls, Idaho. Here they get practical experience in what nuclear power is all about. Besides using the specific knowledge of his rating, a man must display a practical and theoretical knowledge of the entire reactor plant. Once he has done this, he is designated as a qualified nuclear propulsion plant operator. At the end of this 26-week course, certain men are selected for additional training as Engineering Laboratory Technicians (ELT). This 13-week course prepares the student to perform radiological and water chemistry con-

OUR NUCLEAR SURFACE NAVY

Right: USS California (DLGN 36) is one of the Navy's newest surface nuclear ships. She was launched last year at Newport News, Va.

trol functions and associated analyses for nuclear propulsion plants.

Submarine school is next for those who volunteer and are physically qualified. The four-week school is an intensive course of instruction on the layout and systems of a submarine.

Even when all these schools are completed, the training doesn't stop. In fact, it's actually just beginning. When a man reports aboard a nuclear ship, he must qualify on the specific nuclear propulsion plant equipment aboard that ship before he can stand a watch on his own.

Right: USS Truxtun (DLGN 35) was the Navy's second nuclear guided missile frigate. She first sailed in 1964, two years after Congress authorized her construction.

THERE ARE MANY TANGIBLE benefits for the man who completes the nuclear power program. Rapid advancement, not only to E-4, but all the way through the petty officer grades, is a statistically proven fact —nuclear power trainees make it faster than most. Men with Navy Enlisted Classification Codes are eligible for $100-a-month shortage specialty pay if they are serving in a nuclear billet and have extended their enlistments to obligate them for seven years. And if you have greater than 6 years' active duty and are qualified for a supervisor watch you may be eligible for $150 shortage specialty pay.

Navy men with nuclear NECs are eligible for large reenlistment bonuses, even up to the maximum $10,000. The educational benefits don't stop either. Class "B" and "C" schools, correspondence courses, Program for Afloat College Education, Associate Degree Completion Program, and the Navy Enlisted Scientific Education Program are all open to participation by nuclear trainees. Submariners, of course, are eligible for submarine pay, depending on rate and time in service.

THE TRAINING PROGRAM for nuclear officers is much the same as for enlisted men. Once he receives his commission, the officer trainee takes 24 weeks of graduate level training in Nuclear Power School. Like his enlisted counterpart, he then goes for 26 weeks to a Nuclear Power Training Unit. After that, it's submarine school for those who volunteer or surface ship duty for the surface warfare officers. An officer, too, must qualify aboard his specific ship before he can participate in its operation as a watch officer.

The surface nuclear fleet is growing. The number of men it will need—those with the best training the Navy has to offer—is also growing. Nuclear power, and nuclear-trained men, are squarely in the center of the Navy's plans for the 1970s.

—JO3 Jim Stovall

Above left: An artist's concept of the unnamed DLGN-38 now under construction. Left: A proposal is now before Congress to build a fourth nuclear carrier, CVAN 70.

THE Fleet Ballistic Missile Submarine (FBM) USS *John C. Calhoun* (SSBN 630) surfaced west of Scotland recently and moored at Holy Loch, ending the Navy's one thousandth undersea ballistic missile patrol.

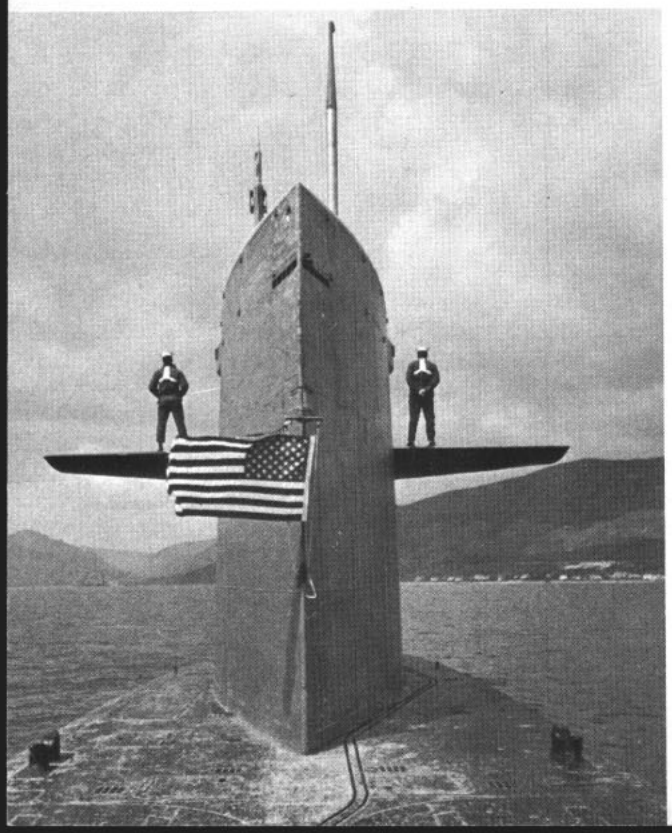
The 1000th patrol ended nearly 12 years after the U. S. first augmented its underground ICBMs with a deterrent force at sea by sending USS *George Washington* on patrol in November 1960.

In the 12 years since, the U. S. nuclear-powered ballistic missile submarine fleet has expanded to 41 ships. In their powerful deterrent role of insuring the peace, the submarines have patrolled the ocean depths for some 6000 days.

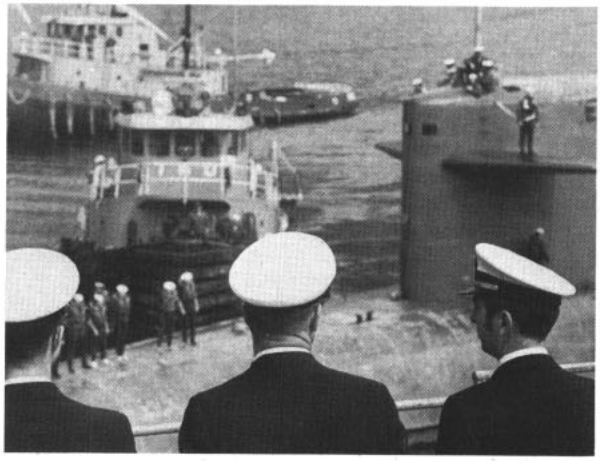
Calhoun, commanded by CDR Thomas A. Jewell of Somerset, Me., was the 26th FBM submarine to be commissioned when she joined the Fleet in the fall of 1964. *Calhoun* has conducted 20 deterrent patrols.

1000th PATROL

Above: Handling the lines aboard USS John C. Calhoun (SSBN 630) after completing the 1000th undersea ballistic missile submarine patrol. Below left & right: coming into Holy Loch, Scotland.



Below: Officers of the Submarine tender USS Canopus (AS 34) watch John C. Calhoun as she ties up alongside. Right: CAPT and Mrs. Paul J. Early congratulate CDR Thomas A. Jewell, CO of John C. Calhoun upon completion of the historic 1000th FBM patrol. CAPT Early is Commander Submarine Squadron Fourteen.



GUARD: Guaranteed Assignment

ENLISTED nuclear-trained personnel are becoming more and more valuable to the Navy. Small wonder—the nuclear fleet is growing and the training is still as rigorous as ever. Consequently, in order to retain as many of these people as possible, the Navy is instituting GUARD, a Guaranteed Assignment Retention Detailing program for nuclear trainees.

GUARD—available to individuals in the ET, EM, IC, MM, EN, and BT ratings, who have Navy Enlisted Classification Codes 3351-3356, 3359, 3361-3366, 3383-3386, 3389 and 3393-3396, and who are completing between six and ten years of active service—will guarantee assignments for many in the nuclear field. Specifically, the incentives are as follows:

- Personnel serving in an operational nuclear sea billet may request a guaranteed assignment to shore duty or sea/neutral duty in the home port of their choice, with an option for a guaranteed follow-on assignment. A waiver of the prescribed sea tour will be granted if necessary.
- Personnel serving in a non-operational nuclear billet or non-nuclear billet classified as sea or neutral duty may request a guaranteed assignment to a nuclear-powered ship in the home port of their choice with an option for a guaranteed follow-on assignment to shore duty.
- Personnel serving on shore duty may request a guaranteed assignment to a nuclear-powered ship in the home port of their choice.

GUARD will apply initially only to nuclear-trained persons within six months of the end of their obligated service, as extended, and who will complete between six to 10 years' active service at their EAOS. Nuclear-trained persons not selected for GUARD may still be reenlisted under normal procedures.

The need for nuclear-trained enlisted men and officers is growing and will continue to do so as the nuclear navy expands. Nuclear power—once almost the exclusive possession of submarines—is now being applied to an ever-growing number of surface ships. The Navy needs men for these ships, and it is expected that GUARD will provide one of the means for meeting the requirements.

He Must Be Ready ... And Right

SUBMARINE CORPSMAN

He is the Medical Department

WHEN A NUCLEAR attack submarine deploys at the beginning of an extended operation, every one of the crew feels a certain sense of responsibility—and the knowledge of a challenge ahead.

Each crewman senses this in his own way, but perhaps it is most sharply felt by the submarine corpsman. As the sole medical man aboard he is responsible for the health, welfare, and safety of the crew until the ship returns to port. Just as the machinist's mate must be able to repair any of the ship's intricate mechanical equipment, the corpsman must be able to care for her crew. When any situation arises, the corpsman must be ready—and right. He doesn't have a margin of error.

Above all else, the submarine corpsman must be well trained and responsible. He has to know his job and his men, and he must be able to react properly to any emergency. The lives of the crewmembers literally depend on him.

Hospital corpsmen throughout the Navy have always commanded great respect. Their training is extensive, and their many heroic deeds are well documented. Submarine corpsmen may rightfully be considered "the elite of the elite."

To be eligible for training as a submarine corpsman, a man must be an HM2 or above, have a combined GCT/ARI of 110, be physically qualified for submarine duty, eligible for a Secret clearance, have minimum obligated service of 18 months, have a high school diploma or equivalent and be a volunteer. It isn't easy, but the rewards are great.

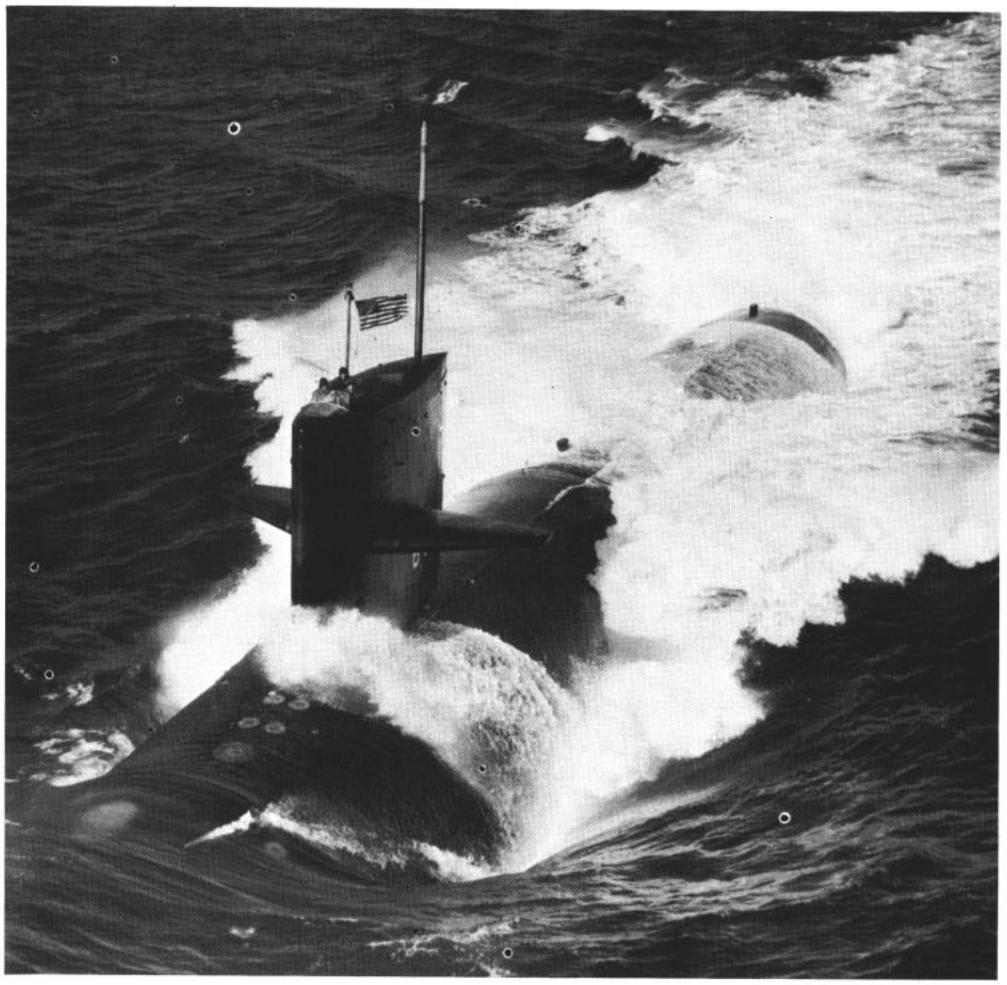
THE SUBMARINE CORPSMAN'S training is extensive and well respected in the medical community outside the Navy.

Entrance into the submarine force entitles a man to submarine pay, depending on his rate and time in service, sea pay and proficiency pay. It could add up to $200 extra a month. Added to this are the advancement rates for sub corpsmen, which are faster than most groups, and a sub corpsman's degree of acceptance into other Navy programs is high.

Beyond all this is the responsibility and control the corpsman has over his own actions. To many corpsmen, this is the part of their job—the real sense of their importance—that is the most satisfying and rewarding.

The submarine corpsman's training, like his job, goes far beyond the regular training. Sub corpsmen must become submarine qualified. That's why the training for a sub corpsman is divided into three sections—12 weeks of nuclear medicine, 12 weeks of submarine medicine, and six weeks of basic enlisted submarine training. The nuclear medicine section qualifies a man for NEC 8407, Nuclear Medicine Technician, and the entire 30-week school qualifies graduates for NEC 8402, Nuclear Submarine Medicine Technician.

The first section teaches trainees about the radiation health protection program and biological effects of internal and external absorption of radiation.

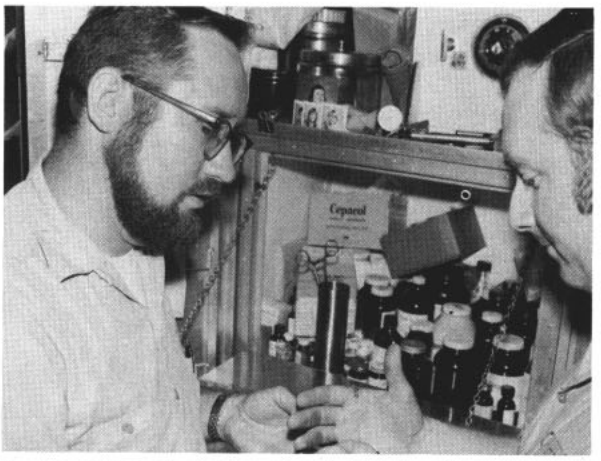


THE SECOND SECTION familiarizes him with the organization of a submarine, and the maintenance of health records. He also learns procedures such as heart massage and artificial resuscitation, the use of splints and casts, sutures, making emergency airways, and the responsibilities of habitability, sanitation and atmosphere control.

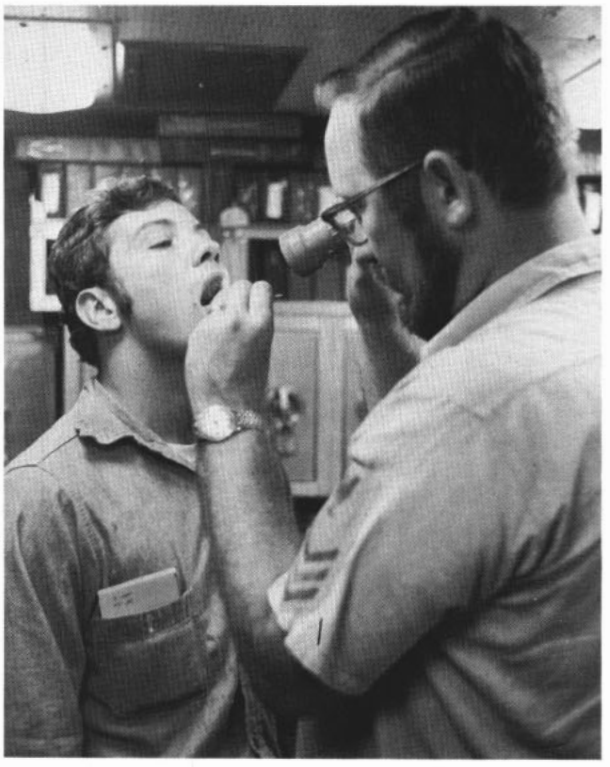
The third section, basic enlisted submarine school, teaches theory and nomenclature of a submarine, the principles of electrical and hydraulic systems, and other mechanical systems of the submarine. The trainee gains knowledge of propulsion, navigation, weapons, and interior communications systems.

This last section of the training is in keeping with a general theory of the submarine fleet—every man, no matter what his specialty, should be able to perform every major function on the boat. Just as the man who launches missiles must know how to fix a splint, so must the corpsman know how to steer the ship.

The medical training, all conducted by professional physician-teachers, includes many hours of practical



Shown top left is the nuclear-powered submarine USS Ray (SSN 653) underway on sea trials prior to joining the fleet. HM1 H. C. Bracken (SS), pictured immediately above, and in the photographs on the following pages, is a qualified submariner with 13 years of naval service. He has been in the Submarine Service since 1967 and is now serving in USS Spadefish.



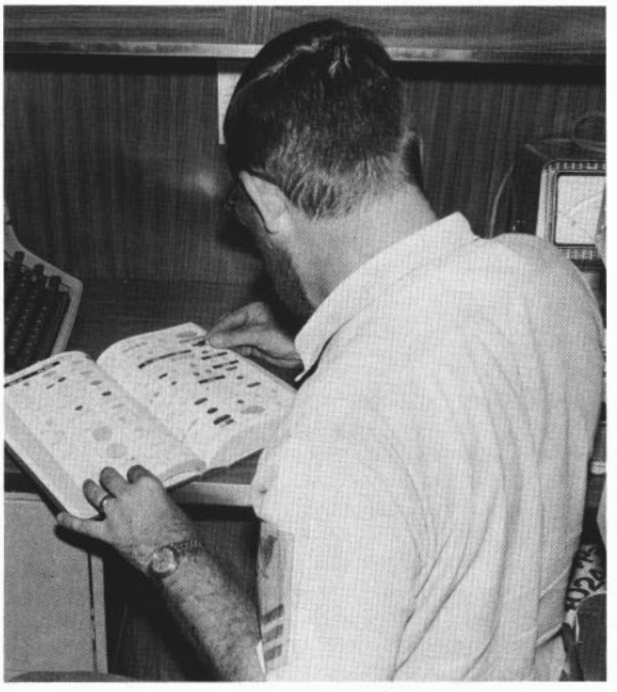
demonstrations and field trips, and it introduces to the corpsman many situations he might not encounter otherwise.

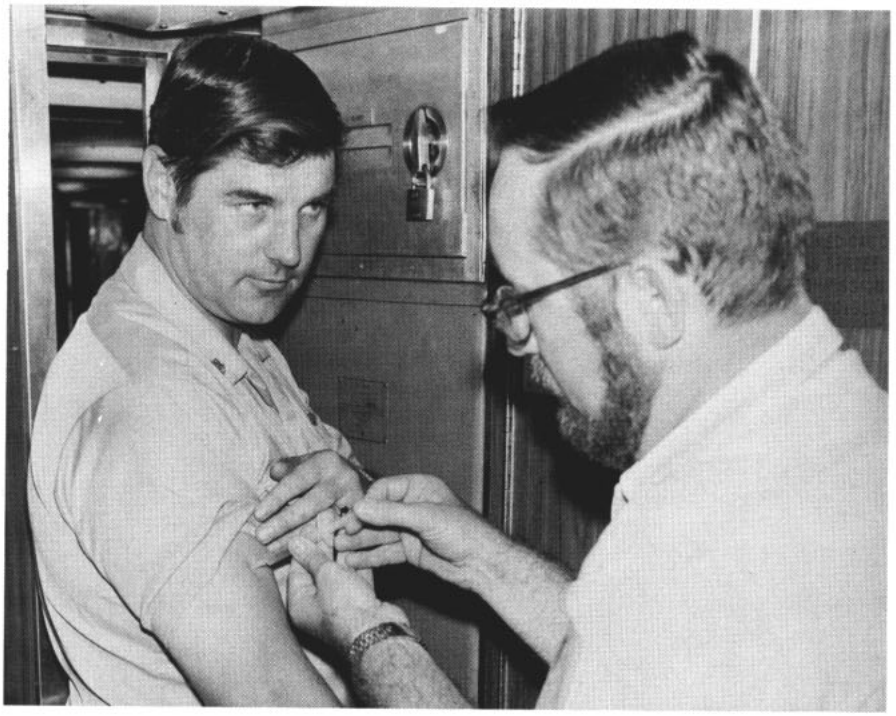
BUT THIS IS ONLY ONE of many roles a corpsman must play before, during, and after patrols. As the boat prepares to get underway, the corpsman must make sure the ship is clean and the berthing and other spaces are adequate. He must check to see that food preparation facilities are healthful. He must test his equipment, and make sure that he is carrying all of the medicine he needs, and make sure, too, that all his instruments are in working order.

Most important, the corpsman must know the physical and mental condition of each man aboard. Not only must a man be healthy on the day the sub deploys, but the corpsman must also be reasonably certain that he will stay healthy throughout the patrol.

Just before deployment, the captain will consult with the corpsman to make sure everything is ready for getting underway just as he will call his other department heads. It is one of the few times in the Navy when an enlisted man is given such a responsibility. If the corpsman says to delay, the boat usually doesn't move.

AT SEA, the routine for the crew and the corpsman doesn't leave much time for loneliness or reflecting on responsibilities. There is no sick call on a sub;





if a man feels badly, he goes to the corpsman and is treated. Crewmembers are taught to report any signs of illness immediately. Any delay could mean trouble.

The practice of preventive medicine continues even after an illness is discovered. The corpsman is taught in school always to work to prevent a more serious problem. He must diagnose quickly and correctly, and he must be accurate in prescribing medicines.

Treating the sick or potentially sick is always the first responsibility of a corpsman. Otherwise, when he isn't standing watches, he's constantly checking just about everything – ship's atmosphere, water, food, cleanliness–anything that might have an effect on the crew's health. Any irregularities are corrected on his recommendation. Any troubles which cannot be cared for immediately are reported directly to the captain, with recommendations for correction.

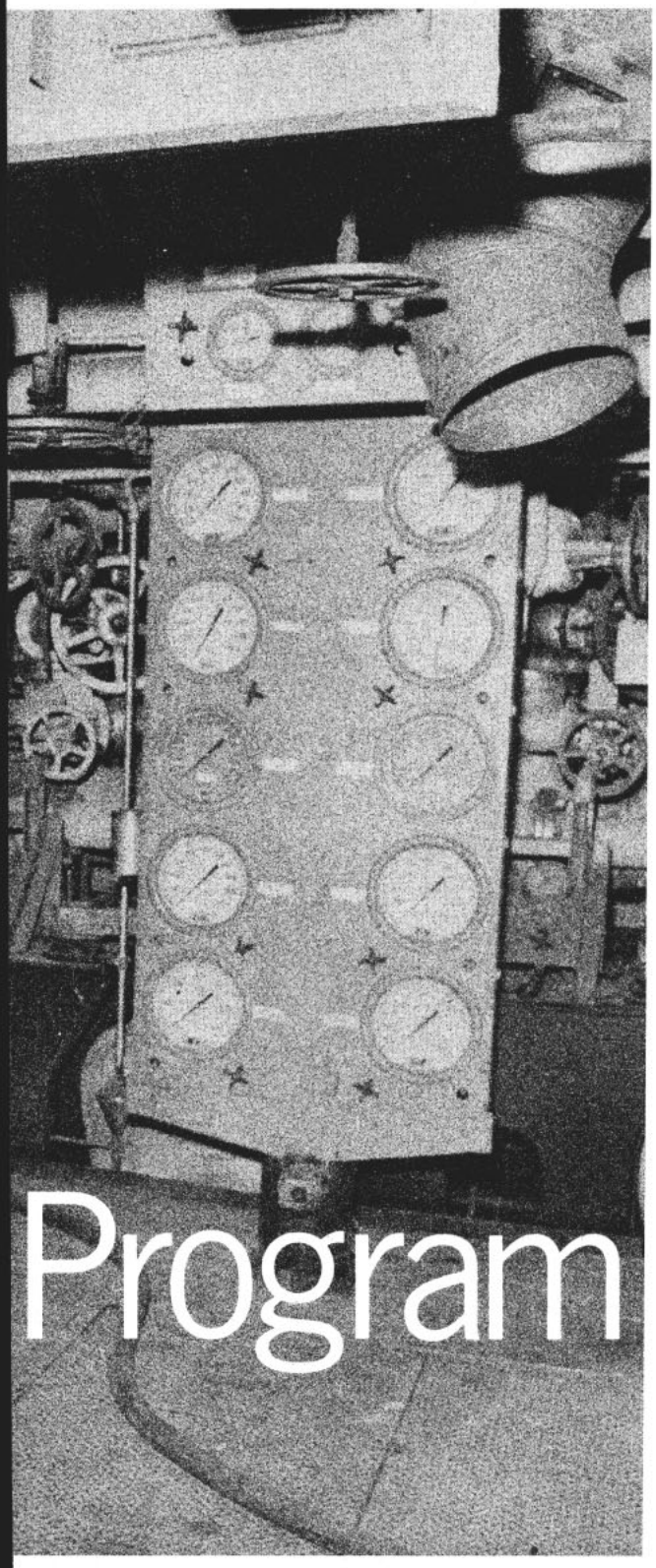
Back in port, the crewmembers and, to some degree, their families are the responsibility of the boat's corpsman. If a crewmember is assigned to a hospital, the corpsman will keep a constant and personal check on him to see that he is receiving proper treatment. If a crewmember's child comes down with something, chances are the man will seek his corpsman's advice.

The key to the submarine corpsman's job is his sense of responsibility–to his men and to himself. The job makes daily challenges in his training and his techniques, yet he knows that the actions he takes may save the life or lives of some of his best friends, his shipmates.

—Story by JO3 Jim Stovall, USN.
—Photos by PH2 Jesse L. Carlisle, USN.

Pictured clockwise from opposite left: Like all submarine corpsmen, HM1 Bracken must be able to identify accurately and catalogue all types of medicines; a knowledge of ears, nose, and throat is a must; keeping immunizations up to date is an important part of the preventive medicine aboard submarines; the nuclear-powered submarine USS Whale (SSN 638) is shown surfaced at the North Pole in the Arctic Ocean.

1200 psi Steam Propulsion Improvement



Program

IT IS NO SECRET to men in a ship's engineering spaces that working with high pressure steam requires considerable ability, not to mention familiarity with equipment and an instinct for doing what's right. In short, if a modern propulsion engineer doesn't know what he's doing, he is in trouble.

For those who don't quite appreciate the picture, it might help to think of 1200 pounds of live steam pressing against every square inch of tubes and pipes carrying main propulsion steam, for that is what's going on when Navy engineers operate a 1200-PSI (pounds per square inch) steam propulsion plant. With energy like that surging through a ship's main steam system, it's easy to understand why engineering personnel must know their job.

The 1200-PSI steam propulsion plant made its appearance in the Navy when, in 1953, the need was felt for smaller, more efficient and lighter machinery plants than had been in use. When the 1200-PSI steam propulsion plant was first installed in Navy ships, it represented a step ahead, but increased tempo of operations and the rapid development of a new system generated problems. When ships began to age, manpower and experience level fell behind operating requirements and the 1200-PSI steam propulsion plant was in trouble. Corrective programs were started but none really got off the ground.

On 1 Oct 1971 there was a change. The Chief of Naval Operations directed that immediate steps be taken on an urgent basis to effect improvement in the material readiness and reliability of these plants, with particular emphasis to be given to destroyers. With this order, the 1200-PSI Steam Propulsion Plant Improvement Program was established with the objective to develop and implement an integrated program to improve the personnel, operational, material readiness and reliability of 1200-PSI steam propulsion plants. The program is concerned with the entire plant and is providing the centralized management and overall

coordination needed to eliminate personnel, design, material, training and logistic deficiencies.

BECAUSE OF THE IMPORTANCE attached to the material readiness and engineering personnel implications, the program was designated a CNO Executive Board Special Interest Program to be implemented on an urgent basis. It involves improvements in 141 ships having 1200-PSI systems including seven classes within four major ship types.

An immediate problem is that there are not enough BTs and MMs to man 1200-PSI ships properly. This sets off a vicious cycle which results in watch and watch, non-use of school quotas, longer working hours both underway and in port, low training level, improper operation, inadequate maintenance and low first-term MM/BT retention rate.

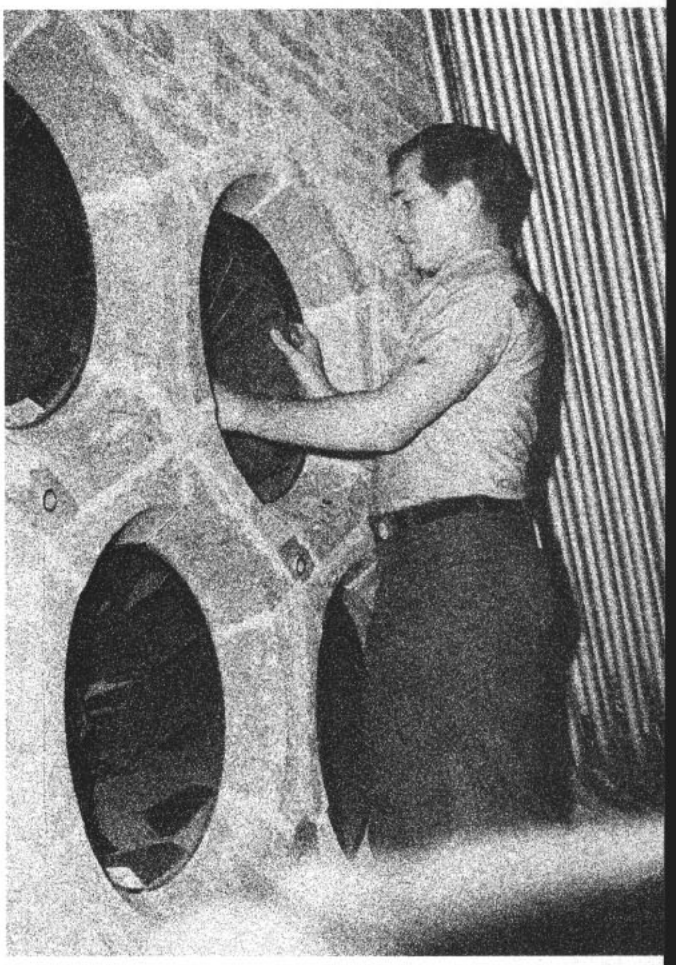
For starters, the CNO acted to rejuvenate the BT rating by classifying an additional 800 personnel as firemen to provide quick relief for 1200-PSI fireroom personnel. The new men began arriving in the Fleet in January and already their presence is being felt as the BT manning level in most 1200-PSI ships is now higher than in ships having 600-PSI propulsion systems. Since the fireroom workload is significantly greater in the 1200-PSI firerooms, the Chief of Naval Operations directed Fleet Commanders In Chief to continue giving preferential manning of 1200-PSI ships in the BT and MM area.

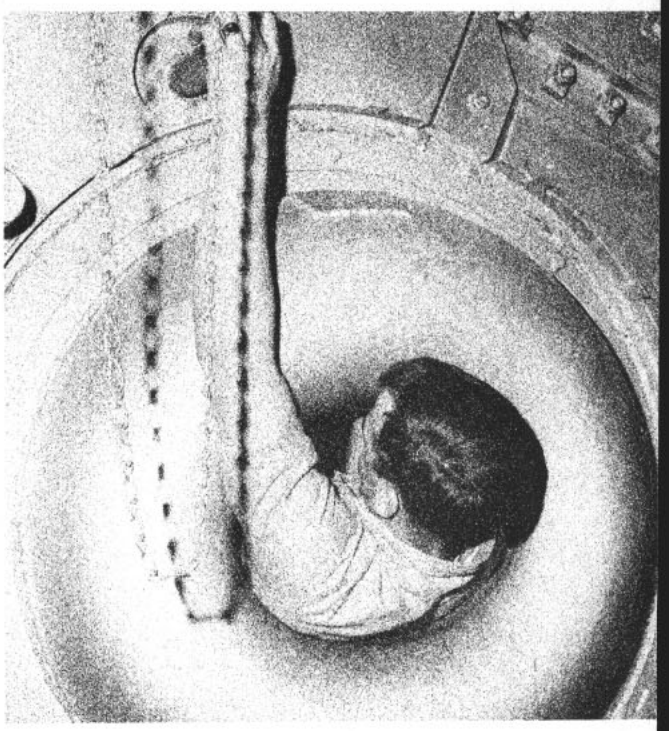
To eliminate the possibility that the Ship Manning Document (SMD) for the engineering department might call for fewer men than were actually needed, an onboard review was made of the Engineering Department SMD in three of COMCRUDESPAC's 1200-PSI ships. The results are being reviewed now. As a follow-on, USS *Henry B. Wilson* (DDG 7) and USS *Jonas Ingram* (DD 938) are being fully manned in accordance with the SMD to determine the validity of the SMD when the engineering department is fully manned. This trial period commenced in May and the results will be available in December 1972.

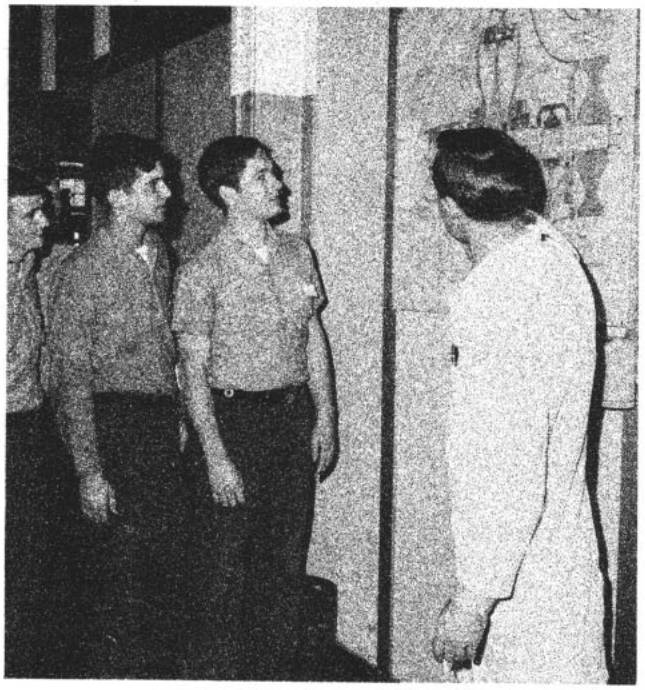
The 1200 PSI Steam Propulsion Plant Improvement Program also recommended the upgrading of FN/FA billets to BTFN in sufficient numbers to provide a 50 per cent increase in the total designated striker billet requirements for firerooms in ships equipped with 1200-PSI systems. To complement the increased number of strikers, all 1200-PSI BT billets in pay grade E-3 (BTFN), E-4 and above in 1200-PSI ships were assigned a 1200-PSI NEC.

Of course, all this building up of fireroom strength would eventually be brought to naught if there weren't some provisions made for future training for fireroom duty. Taking note of this, the CNO directed that BT "A" School enrollment be increased by 20 per cent beginning January 1972 and the first of the graduating BTFNs started reporting to the Fleet in March.

In addition, a new 1200-PSI operator course was established last January at the BT "B" School in Philadelphia. This school trains 25 graduates from the BT "A" School who are selected for their high quality and given training in the operation of 1200-PSI firerooms located there.







Students completing this course are assigned an NEC as qualified 1200 PSI operators, thereby assuring assignment only to 1200-PSI ships. Quotas for this course are also made available for Fleet BTs.

Pro pay was approved for qualified 1200-PSI BTs effective July 1971.

FOR THOSE WHO ARE INTERESTED in applying, the 1200-PSI operator course at Philadelphia convenes every three weeks and, so far, has proven to be highly successful.

Over the long haul, however, improvement in the training setup will center on the establishment of a formal training and qualification program. This will require a training level that will qualify both officers and enlisted men to stand watches, and operate and maintain their ship's propulsion plant. In the past, such a program would have been somewhat impeded because there was only one 1200-PSI shore-based operational propulsion plant available for training propulsion personnel. This situation, however, will be remedied in December 1973, when a second shore-based 1200-PSI hot plant is completed at the Great Lakes Naval Training Center. This new facility will be a duplicate of the DE-1052 class propulsion plant.

Also, in August, the first of six permanent 1200-PSI Mobile Training Teams began giving onboard instruction to COMCRUDESLANT ships at Newport, Rhode Island. Plans are now underway for other teams to be established to provide similar shipboard training at Norfolk, Charleston, San Diego, Long Beach and Pearl Harbor.

1200-PSI Propulsion Examination Boards are scheduled to begin work at Norfolk for LANTFLT and San Diego for PACFLT ships in October. They will monitor and evaluate the effectiveness of the overall training and qualification programs and the engineering readiness of all 1200-PSI ships.

ONE OF THE MAJOR IRRITATIONS in an engineer's life has been caused by supply (or the lack of it). There never seems to be an adequate number of parts available with which to mend ailing 1200-PSI plants. To remedy the situation, 22 ships having 1200-PSI propulsion systems were visited last fall to see what could be done about improving the situation. The visit resulted in the first comprehensive review of supply support for 1200-PSI Automatic Steam Plant Control systems ever conducted. About 300 Allowance Parts Lists (APLs) involving between 20,000 and 25,000 line items were reviewed in detail and compared with associated technical manuals and drawings. To continue the good work, similar reviews have been scheduled for all 1200-PSI systems and SOAP procedures will be reviewed with the objective of improving overall supply support.

Engineering improvements are being planned in the 1200-PSI steam propulsion systems to improve plant

Facing page, top: Installing a diffuser plate to a boiler air register. Facing page, bottom: Entering a boiler water drum. Left top: Receiving instructions on one type of steam turbine. Left: Working on a fuel oil burner assembly.

Steam Propulsion

reliability, safety, operation, maintenance and components with emphasis being placed on developing or improving labor-saving devices which will ease an engineer's maintenance burden. One goal is eliminating the need to clean boiler watersides during a ship's operating cycle between regular overhauls. Admittedly, this is a big order, but there is hope. USS *Yarnell* (DLG 17), for example, is testing and evaluating a promising boiler water treatment method which prevents solids in the boiler water from adhering to its interior. At the same time, an automatic boiler water-testing system was evaluated in USS *Semmes* (DDG 18). This system will require further development and testing.

Air dryers and improved low pressure air compressors will also be installed in 1200-PSI plants beginning in FY 1973. These will provide higher quality air for automatic control systems operation. Present plans also call for reduction of 1000-PSI fuel oil systems down to 350-PSI systems, thereby simplifying maintenance problems, reducing fuel hazards and increasing plant reliability.

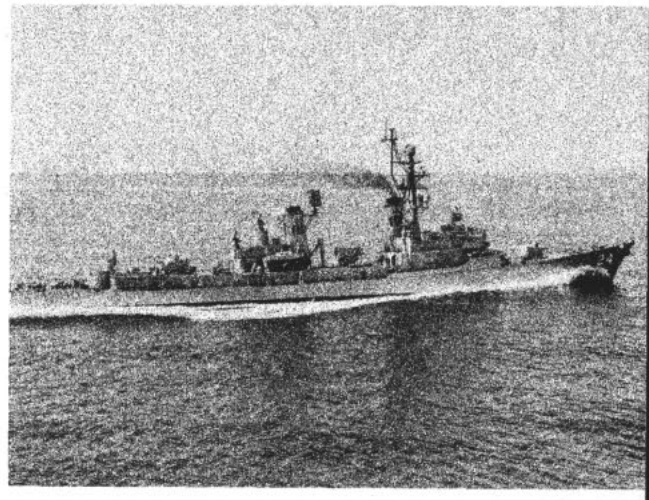
IN ADDITION TO TAKING MEASURES which directly affect ship's propulsion systems and the acquisition, training and supplying of the men who run and maintain them, the Chief of Naval Operations has taken steps to improve morale by amending shipboard procedures, allowing fireroom Navymen more time for liberty while in port and alleviating shipboard working conditions. Steps have also been taken to improve engineers' work clothes.

One obvious method of seeing a man has a better chance at port liberty is to lessen his maintenance workload aboard ship. To do this for the men in the fireroom the CNO plans to establish a pilot shore support group at a major home port to help conduct ship's maintenance while in port. This pilot group is scheduled to go to work in January at San Diego.

In a related effort, the CNO is proceeding with plans to establish Fleet Maintenance Assistance Groups at Long Beach, San Diego, Newport, Charleston, Mayport and Key West. These groups will provide direct maintenance and training assistance for ships in the weapons, electronics, operations and supply support areas as well as in engineering. The shore support groups are expected eventually to merge with the Fleet Maintenance Assistance Groups.

In response to suggestions concerning work clothes for engineers, the CNO has initiated action to develop new and more suitable coveralls and a wear test for safety shoes is now being conducted to determine the advisability of substituting a new product for the work shoes now being used.

TO ALLEVIATE SHIPBOARD WORKING CONDITIONS for engineers, CNO sent a personal letter to all flag officers, commanders, commanding officers and officers in charge, directing that specific actions be im-



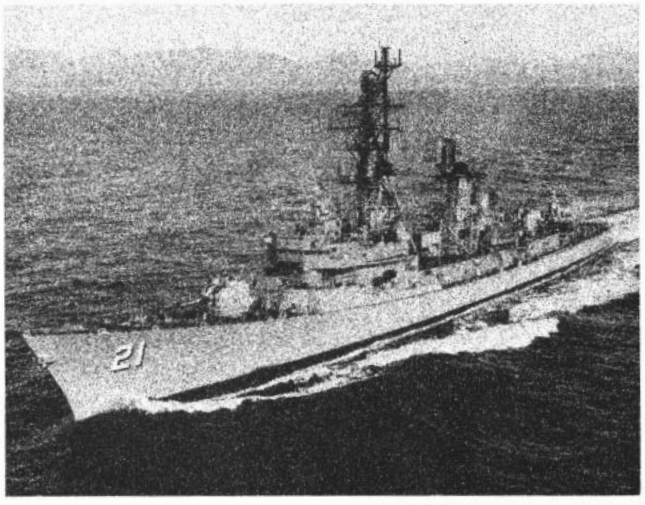
NEW PROPULSION TRAINING PLANT

GROUND WAS BROKEN this June for the $5.7 million 1200-PSI Propulsion Engineering Training Building at the Service School Command of NTC Great Lakes. Shown on these pages is an architect's drawing of the facility that will be used to train sailors in the operation of the 1200-PSI steam propulsion plant that powers the Navy's newer ships, described in the article on pages 14-19.

At present, training for Navy enlisted men in the use of this new high-pressure propulsion system is being conducted aboard the actual ships as they join the Fleet. The new facility will enable more men to be trained in greater depth before they go to sea.

In a message to the participants at the groundbreaking ceremony, Vice Admiral Malcolm W. Cagle, USN, Chief of Naval Training, said, "We have long needed this essential training facility to provide the

Top, l. to r.: USS Waddell (DDG 24) and USS Cochrane (DDG 21) are powered by 1200-PSI steam propulsion plants. Right: New Propulsion Engineering Building under construction at NTC Great Lakes.



BEING BUILT AT NTC GREAT LAKES

Fleet with boiler technicians and machinist's mates highly qualified to operate and maintain high-pressure propulsion systems."

The facilities in the Propulsion Engineering Training Building will duplicate a shipboard steam plant, but will also have enough space for a large number of trainees. The annual student output is expected to be 6250 machinist's mates (conventional and nuclear) and 3000 boiler technicians. After training at Great Lakes, these men will join the Fleet to serve in 141 1200-PSI steam propulsion ships.

Among these ships are the aircraft carriers USS *Saratoga, Ranger, Independence, Kitty Hawk, Constellation, America* and *John F. Kennedy*. The high-pressure systems are also used by newer escort ships like USS *Bagley* and *Elmer Montgomery* and guided missile destroyers like USS *Waddell* and *Cochrane*.

plemented immediately. Some of the more salient actions are:

- Review shipboard collateral duties and consider exempting BTs from duties such as shore patrol, mess cooking and quarterdeck watches.
- Discontinue the practice of lighting off during the weekend while in CONUS and, unless the operational commanders deem otherwise, discontinue the practice of lighting off during the weekend in overseas ports as well. Lighting off will normally be done after 0800 on Mondays and steam cross-connections will be used whenever the opportunity is presented.
- When entering home port after normal working hours, delay routine refueling until the next working day unless the amount of fuel on board is inadequate for foreseeable circumstances.

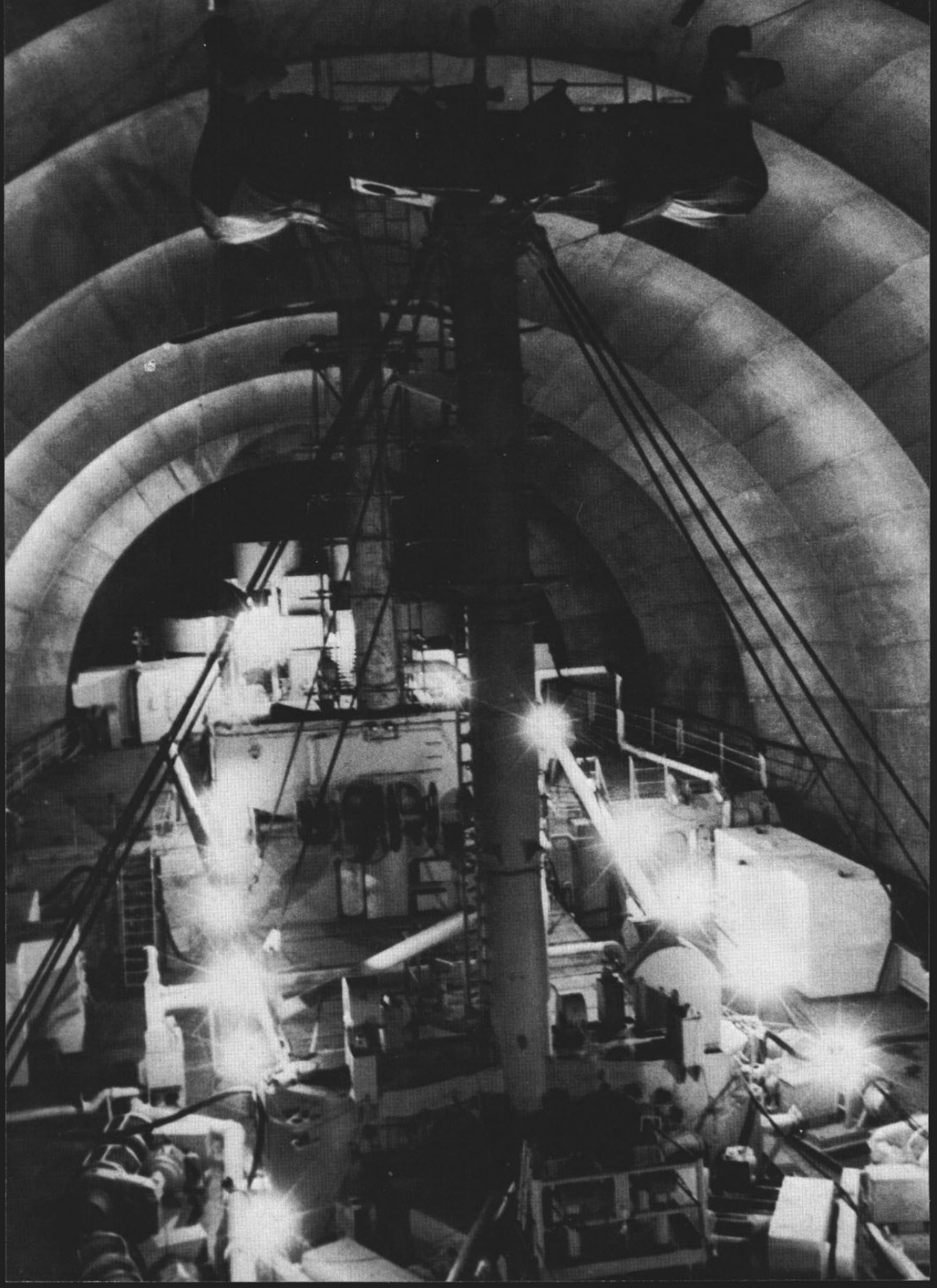
Engineers probably agree that the Navy has bitten off a large chunk in its attempt to make the 1200-PSI Steam Propulsion Plant responsive to Fleet needs. While the problems in 1200-PSI plants are not peculiar to these plants, they are more critical because of the unforgiving nature of these plants. The CNO has, therefore, given the 1200-PSI Program top priority and, as the improvements evolve, there will undoubtedly be benefits for all ships. —Robert Neil

How to Get a 1200-PSI Ship

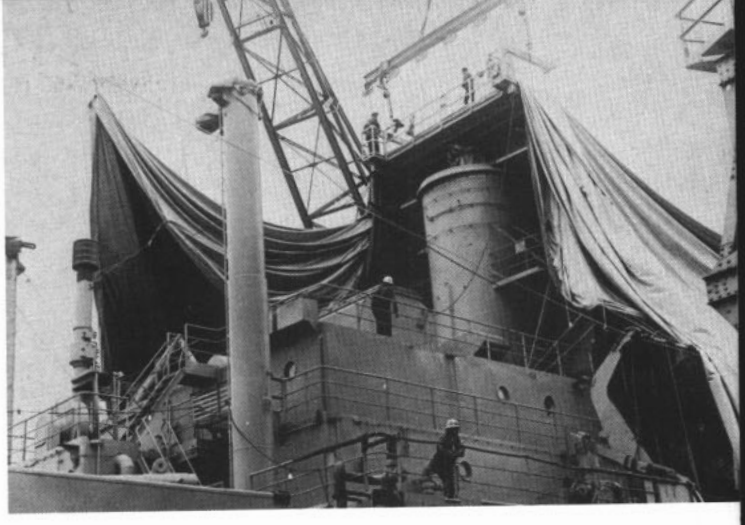
SINCE STEAM SYSTEMS IN NAVY SHIPS range from 450 to 1200 pounds per square inch, Boiler Technicians and Machinist's Mates who want to feel the ultimate power surge often move from older to newer and more sophisticated equipment. For those who desire this, the news is good because there is a critical shortage in 1200-PSI ships and intra-Fleet and engineering proficiency transfers have been established to allow BTs and MMs the opportunity to become proficient in the different conventional propulsion systems used in today's Navy. BTs qualified in 1200-PSI ships are assigned an NEC to identify their skill for more effective distribution and, as an added inducement, pro pay was approved for specific BT rating areas.

Navymen who are coded with NECs for work on ACC systems of either 600-PSI or 1200-PSI plants may be transferred to a ship having a similar ACC system. BTs and MMs who want 1200-PSI training and assignment to 1200-PSI ships can get it if they meet all prerequisites for this training, including any obligated service incurred as a result of the training.

In considering a man for reassignment, the interests of the Navy come first, nevertheless, the Navy's interests right now are pointing toward the 1200-PSI System. Those who want experience in different plants should request it on their Duty History and Preference Cards—a simplified procedure which became effective 1 June for BTs and 1 July for MMs.



ON THE SCIENTIFIC FRONT



New Advance in Topside Preservation for Mothballing

THE NAVY HAS SUCCESSFULLY DEVELOPED a new method for ship topside preservation. The ship's deck, topside equipment and superstructure are completely covered from bow to stern by a single, custom-engineered, air-supported, plastic structure within which dehumidified air is circulated.

The advantage of this method is that significant time is saved in reactivating a ship to full operating status, and speed of reactivation is critical to the Navy's response in an emergency.

Illustrating this latest mothballing method is the attack cargo ship USS *Betelgeuse* (AK-260), now berthed at the Philadelphia Naval Shipyard.

The new process requires minimum dismantling of a ship's topside equipment for stowage below deck. Winches, controllers, directors and other topside gear remain in place. (See photos above and at left.)

Lab Works With Aluminum to Increase Efficiency of Satellite Solar Cells

SOLAR CELLS used in satellites frequently absorb 90 per cent of the incident solar energy while converting only 10 per cent to electric power. This results in about 30 per cent decreased efficiency.

The Naval Research Laboratory, however, is working on a technique to cool solar cells by replacing the fiber glass insulation of the solar panels with a much thinner anodized aluminum dielectric layer which conducts the cells' heat to the cooler satellite framework. The panel portion surrounding the solar cells is then coated with metallized teflon to reflect and radiate solar heat.

New Type Radar Sees Beneath Surface, May Detect, Locate and Describe Objects

A KIND OF RADAR which sees beneath the ground has been developed under an Office of Naval Research contract. With the new development, the Navy hopes to be able to detect, locate and describe buried objects.

Called Electromagnetic Subsurface Profiling, the system is similar in many respects to seismic methods of geophysical exploration. It is portable and operates on only a few watts of power, although the signal can be increased to probe deeper layers of the earth.

The Navy hopes to use subsurface profiling for examining permanently frozen ground (called permafrost) in arctic and subarctic areas. Any construction or land use in permafrost areas depends on understanding the nature and extent of subsurface conditions, particularly whether large masses of ground ice exist beneath the surface. If these factors are unknown at the time of construction, costly repairs may be necessary or the structures may even have to be abandoned.

Heretofore, permafrost testing has been accomplished through obtaining core samples and by use of seismic or other geophysical methods—all of which have produced less than satisfactory results. Tests using electromagnetic subsurface profiling, on the other hand, have successfully located ice, silt, strands

of wire, wood, cement blocks and metal all buried in sand and silt. The system even detected a tunnel.

Further tests are being conducted in actual permafrost near Barrow, Alaska, the site of ONR's Naval Arctic Research Laboratory. Future development may see new data processing techniques for improving data display and exploration aimed at developing an airborne system.

Research Center Transfers Records on Tape Of Language of Undersea Creatures

OLD-TIMERS at San Diego's Naval Undersea Research and Development Center probably recalled the difficulties they encountered in 1942 when they made disc recordings on the deck of a rolling ship. Recently, they re-recorded their findings on tape.

The discs preserved the grunts, groans and shrieks of sea animals—not that the beasties were in distress. They had always sounded like that but nobody had ever heard them above water.

The technical difficulties were many and, once recorded, each noise had to be placed in its proper group. Eventually, all were classified except a mysterious crackling sound which was finally identified as being snapping shrimp.

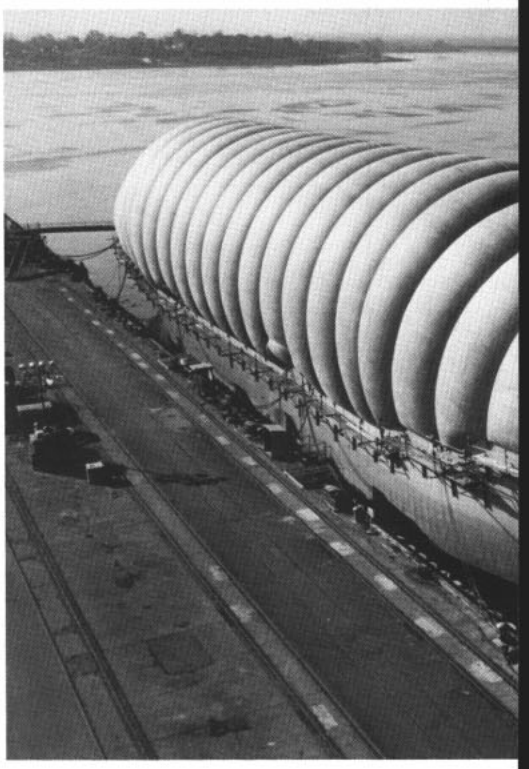
Now, all the underwater sounds are being transferred to magnetic tape and the disc recordings (except for the first three which are preserved for history's sake) are being destroyed.

Early recording was made on discs because the group didn't receive a magnetic tape recorder capable of scientific quality until 1947. This machine was used in connection with the evaluation of captured WW II listening equipment.

Had Your Brain Waves Recorded Yet? New Technique May Show Aptitudes

RATHER THAN USING PENCIL AND PAPER TESTS, the Navy of the future may predict a recruit's service performance by measuring his brain waves. The Office of Naval Research is supporting a study by San Francisco's Langley Porter Neuro-psychiatric Institute in which brain wave records (electroencephalograms or EEGs) are used to obtain information concerning an individual's mental capability.

To date, small groups of recruits who had already taken the regular aptitude tests have had their brain waves recorded. Their careers will be monitored for the next four years to determine whether the new measurements help predict success or the lack of it when combined with more conventional test results.



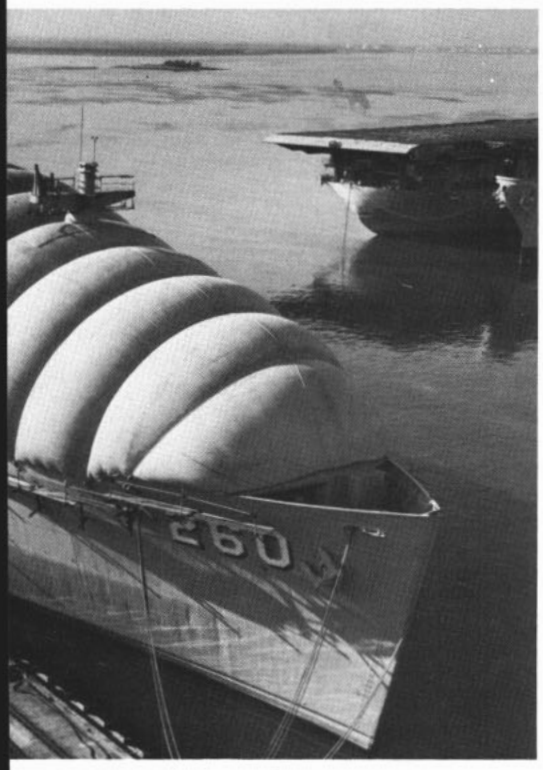
Above: Outside view of the Navy's new method of topside preservation, consisting of an inflated plastic membrane filled with dehumidified circulating air. Shown here is the "mothballed" attack cargo ship USS Betelgeuse (AK 260). See story and other illustrations on preceding pages.

A computer is used in conjunction with the EEG measurements to determine specific brain responses to such stimuli as flashes of light or brief sounds. Indications are that an intelligent person would rapidly lose interest in these ordinary stimuli and display flattened brain waves when the stimuli were repeated. A less intelligent person would continue to respond.

Rocket Test Called Successful Despite Rough Sea Conditions

THE Hydra Sandhawk System, designed in 1967 by Point Mugu's U. S. Naval Missile Center, was tested recently off San Nicolas Island. USS *Norton Sound* (AVM 1) furnished support.

Conditions were not ideal. When the rocket and launcher were put over the support vessel's side, they bobbed up and down in the rough sea. Nevertheless,



the firing sequence was started in the mobile van on board *Norton Sound*. When the countdown ended, the slim two-stage rocket rose out of the Pacific in a burst of steam and boiling water and disappeared into the overcast sky. *Norton Sound's* tracking radars indicated the flight was successful.

Sandhawk was undertaken to measure X-rays originating from sources above the atmosphere. Fabrication began in 1968 and the flight hardware and floating launcher were ready in 1970. Last fall's launching was the first of two flight qualification tests for the new system.

The Hydra-Sandhawk may succeed the older Hydra Iris system because of its ability to launch heavier (300-pound) payloads to a height of 150 miles. It is also easier to assemble and has a simplified launcher.

Lab Develops Safe Disinfectant Which Also Is Termed Inexpensive

A GENERAL PURPOSE disinfectant for use as an antigerm agent has been developed by the Naval Research Laboratory. The ingredients are safe, effective and inexpensive.

The new substance can be used to disinfect hospital floors, wards and operating rooms without interrupting normal activities.

It can also be used to sterilize food processing machinery and for disinfecting land areas.

Although the disinfectant is designed to kill the most resistant disease-causing spores, it is also gentle enough to be used in most areas of the human body, including open wounds, the NRL report says.

Experiments have been conducted in which the new material has been used to disinfect fully clothed men without irritating their skin or damaging their wool, nylon or cotton clothing or their shoes. It has also been tested on electrical devices such as small drills and radios without affecting their normal operation.

Construction material has also been disinfected without evidence of corrosion or other deleterious effects.

Navy Scientists Aid Heart Research By Solving Problem of Radioisotopes

PROBLEMS INVOLVING adequate production of a cesium radioisotope used to diagnose certain heart defects have recently been solved by scientists at the Naval Research Laboratory's cyclotron. Results have enabled Cincinnati Medical College heart specialists to establish a dose of the isotope which will produce a high quality heart image.

Use of the cesium radioisotope is particularly valuable in detecting myocardial infarction (area of the heart muscle which is dying because of lack of blood). Each year, more than 500,000 deaths occur in the United States (mostly as a result of shock) because doctors have been unable to ascertain how much of the heart has been deprived of blood.

There is hope, however, that this diagnostic deficiency can be corrected. Researchers, who have injected the cesium radioisotope into dogs, have traced the radioactivity through the normal heart muscle and are therefore able to locate the portion of the muscle through which blood has ceased to flow.

By regularly injecting the cesium radioisotope into the bloodstream of hospitalized patients, doctors may be able to predict accurately which patients are likely to develop shock after myocardial infarction so that early therapy can be initiated.

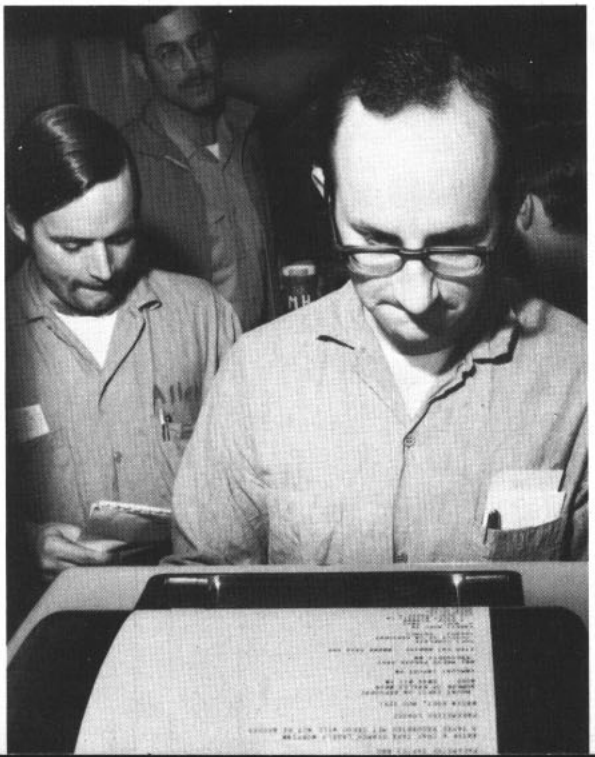
jfk computer wonderland

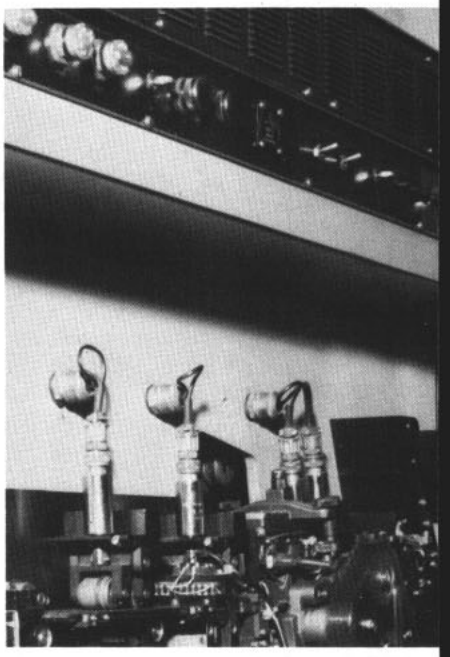
Above: Setting up the cards at a key punch.
Below: Typing new input.
Below, right: Feeding punch cards into CRPI.
Facing page: Changing reel of magnetic tape on computer.

DOWN . . . DOWN . . . DOWN . . . then a little door; fortunately, you don't need a key to pass through, and there's no glass table or bottle labeled "drink me." There is no rabbit hole or tiny locked door aboard USS *John F. Kennedy* (CVA 67), but there is a small hatch on the fourth deck which leads into a modern Looking Glass World. It's not an absurd Wonderland, but rather the super-logical world of Automated Data Processing (ADP).

Upon entering ADP, you're greeted with colored flashing lights and sounds of whirring, clicking and humming which fill the room. An odd creature spills a constant flow of folding paper in quintuplicate, while another seems to be endlessly shuffling cards.

The machines in ADP work for dozens of divisions on the ship and, better than that, they work for every man aboard *Kennedy*—since all paychecks are processed by these computers. There is a complete set of cards, punched with names, divisions, rates and Social Security number; these cards go to the disbursing office where the amount of the member's check is indicated on his card. When they come back to ADP, the cards are punched with that number, then run with green cards—which become paychecks—through the interpreter. The interpreter reads the first card, then prints the name, Social Security





number and amount of the check onto the green card. Finally, the cards which have become paychecks are sorted by division and returned to Disbursing to be checked for accuracy.

OF COURSE, paychecks aren't the only responsibility of ADP. The computers—and men who run them—also keep personnel records, and prepare battle bills, space assignments, supply inventories, and even calendars at Christmas.

In an adjacent room you'll find several men working at what appear to be oversized typewriters; actually, five of these are keypunch machines and the other three are verifiers. The shuffling machine is actually a sorter which can arrange cards in any number of different orders to produce the desired information.

The ADP system begins when a man working the keypunch machine punches the card, which then goes to the verifier where it is punched again to ensure accuracy. Punch cards then go to a machine which reads the holes and transfers the contents of each card onto a magnetic tape. Information stored by electrical pulses on these tapes can be recalled by the computer when it needs additional input to give an answer or make a status report. The computer can also indicate the need for more information, which is fed by a number of methods including a teletype console.

After traveling through complex electric circuitry, results are translated and printed out on a large accordion of paper in the desired number of copies. These printed sheets are designed to be read by humans.

MUCH OF THE INFORMATION fed into the ADP computers is prepared by a central office such as Commander Naval Air Forces Atlantic, then shipped to *Kennedy* and other ships with similar equipment. This provides for a standardization of programs not

previously possible. The "AutoPers" programs, for example, contain all the information found in a man's service record; within minutes, ADP could tell you how many men there are aboard *Kennedy* who had been to the Republic of Vietnam, or who were born in Boston, or hold college degrees.

So far, the Navy's nontactical use of computers has been almost exclusively for supply-related purposes, but on board *Kennedy* computer facilities—and the types and number of jobs performed—have been expanded. Punch cards are the key, since the limits of a computer are largely determined by the amount of input that can be provided by men punching cards. Keypunch machines aboard *Kennedy* are manned 24 hours a day, and the 23-man staff of ADP produces some amazing results. The semiannual pay record processing previously required about 1000 manhours in the disbursing office; with their computers, the ADP crew can finish the job in less than five hours.

Considering the complex nature of the computers, the vast amounts of information they store and recall, and the almost infinite variety of jobs they can perform, it wouldn't be too difficult to imagine ADP's computers taking command of the ship. But it won't happen—computers do only what humans tell them to do. And, if you ever begin feeling a bit inferior to this complex system of whirring computers and flashing lights, you could find consolation in Alice's words: "You're nothing but a pack of cards, a pack of cards, a pack of cards. . . ."

—Story by JOSN P. Michael Reidy,
Photos by PH2 G. Lloyd

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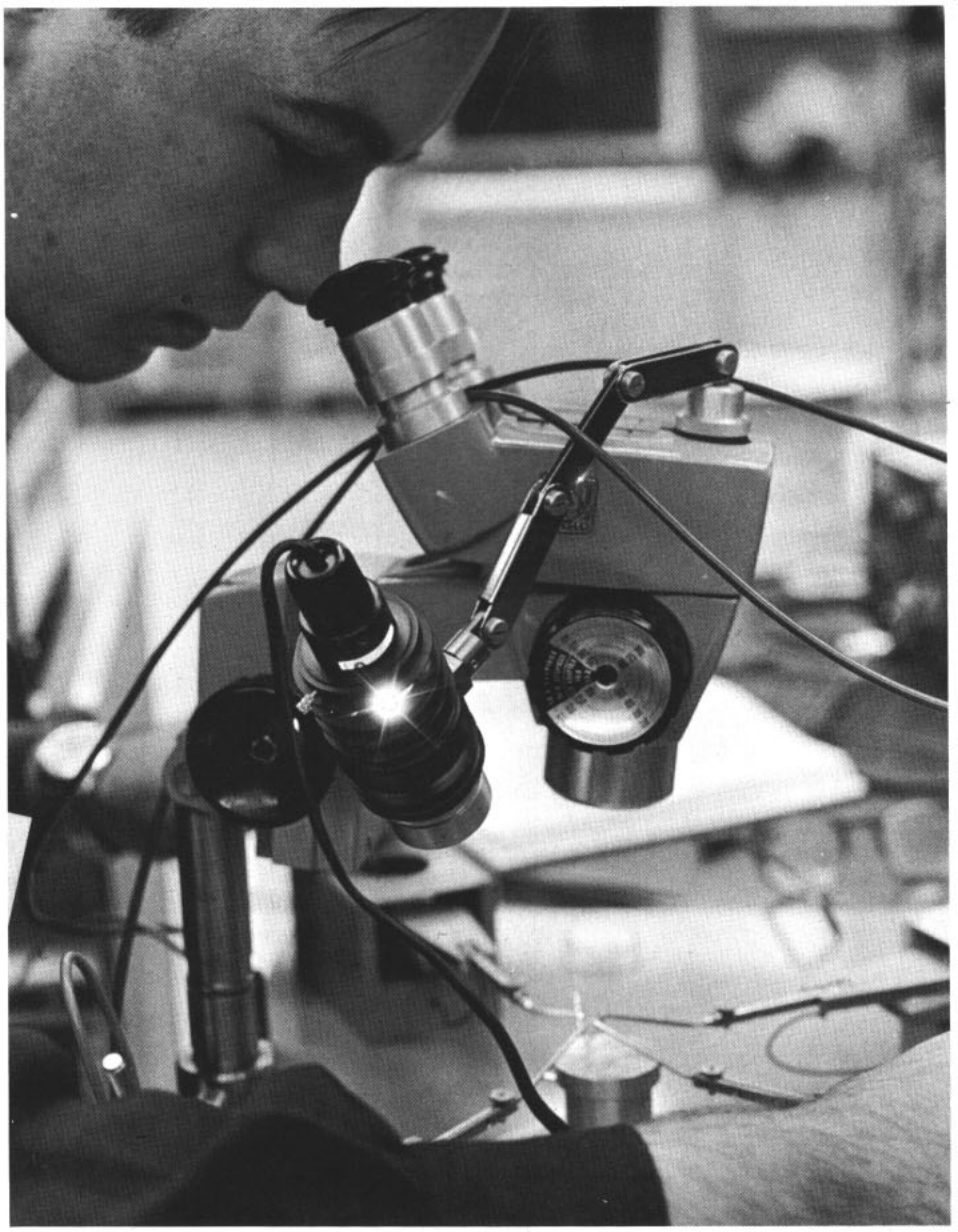
CONSTRUCTING COMPUTERS



HOW WOULD YOU LIKE TO BUILD your own computer for less than 10 dollars? That's what first classmen, majoring in electrical engineering or physics at the Naval Academy, now have the opportunity of doing. It's all part of their work in a course known as "An Introduction to Integrated Circuits," a new elective being offered for the first time.

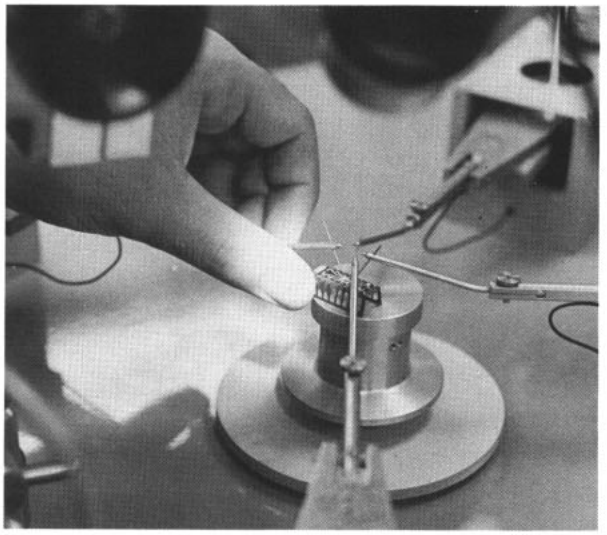
The course involves a basic familiarization with the qualities and capabilities of miniature integrated circuits so small that the entire circuit board must be

handled with tweezers and examined under a microscope. Silicon wafers are used to replace transistors and vacuum tubes in low power circuits such as operational amplifiers in analog computers and missile or satellite guidance systems. They often perform the function of components which, using individual transistors or tubes, would be many times the size and far more subject to functional breakdown due to the many soldered connections.

In addition to being smaller and more reliable, the minute silicon chips, when manufactured in quantities, cost a fraction of what the same circuit using individual transistors and tubes would cost. This low production cost has made it possible for the Academy students to build their own computers. Associate Professor R. P. Santoro, director of the course, notes that until this time most average budget schools were unable to provide their students with individual computers for experimentation because of the prohibitive cost.

"Of course," says Professor Santoro, "these student-built computers don't have the high accuracy or multiple functions of some of the higher priced commercially produced ones, but they are plenty efficient for student use." The object of the course, according to the professor, is not to turn out experts in the integrated circuit field, but to make naval officers able to understand the vast capabilities of these circuits and to assist them in making intelligent use of them within the naval establishment.

—Story and Photos by PHCM Ken Bumpus, USN

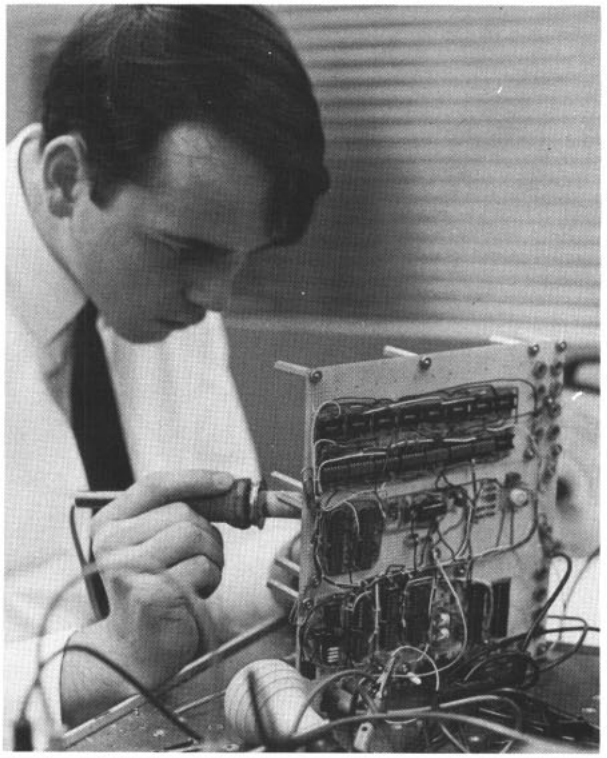


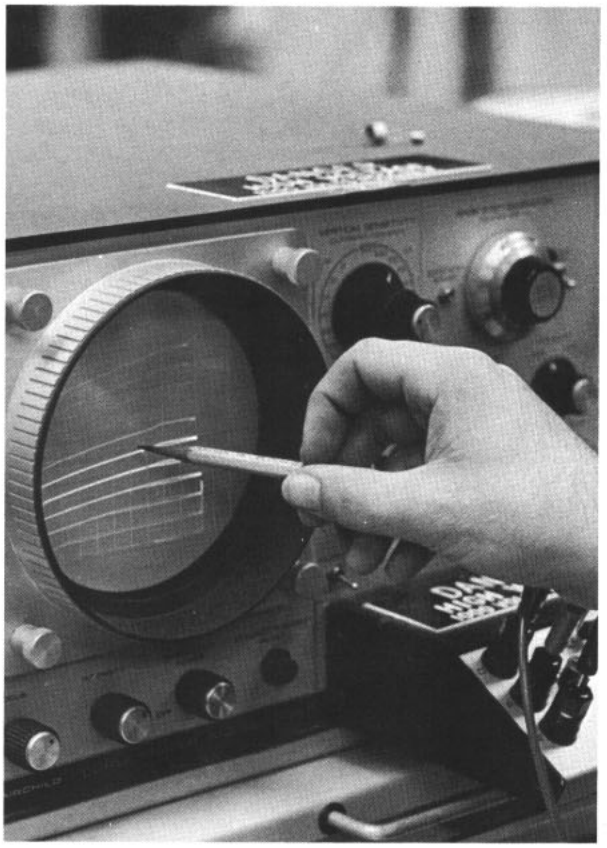
Facing page: The tiny wafers are examined under a 60-power microscope to analyze the circuitry imprinted on the silicon chip.

This page, bottom left: A digital filter being assembled as part of a midshipman research project.

Below: After placing the probes with the aid of a microscope, the circuit is energized and the performance is analyzed.

Above: Hair-like probes are guided to the contacts printed on the minute silicon chip prior to encapsulation in epoxy.





an ancient science with modern efficiency

Quartermasters of Constellation compute ship's position by use of sextant and charts.

AN ENLARGED TRAINING PROGRAM and new navigational aids are streamlining operations for quartermasters in the attack aircraft carrier USS *Constellation* (CVA 64). *Constellation* updated its satellite navigation and internal communications systems while going through a recent overhaul. The improved systems have freed navigation department personnel for training in the basic aspects of their trade.

Quartermaster 1st Class Richard Nystrom, Navigation's leading petty officer, is working to improve the professional competence of his crew. Tasks once assigned only to senior personnel are being delegated to 3rd class petty officers and seamen. These men are learning to compute the ship's position by sunlines, the sextant and the stars.

The ship's position is usually triangulated by electronic devices. The science involved in mentally cal-

CMI: Computer-Managed Instruction in Memphis

BY NEXT JULY the Navy's first Computer-Managed Instruction (CMI) system will be fully operational at the Naval Air Technical Training Center, Memphis, Tenn. Within the next five years a majority of the Center's "A" schools will be under the CMI system.

The Aviation Mechanical Fundamentals Course has been cut from four to three weeks by a course analysis conducted by a CMI team and course personnel. A further reduction to two weeks is planned, and with the individualized computer instruction it is believed that the time can be slashed to an average of one week. This will affect about 200 students each week.

The two-week Aviation Familiarization Course has been reduced from two weeks to one by the course analysis. It is planned eventually to reduce this to three days. This will involve some 300 students each week.

The CMI project was initiated five years ago by the Chief of Naval Air Technical Training. During the project's early days, CMI personnel worked closely with Memphis State University which assisted in developing the computer programs.

Until recently, instruction tailored to the aptitude and experience of each student has been beyond the reach of Navy training. However, a two-track training system has been in effect at the Avionics Fundamentals Course at Memphis since 1968. Called "fast track," it is designed for the more able students and completes in 14 weeks a normally 20-week course.

culating ships' positions could be all-important if such equipment failed.

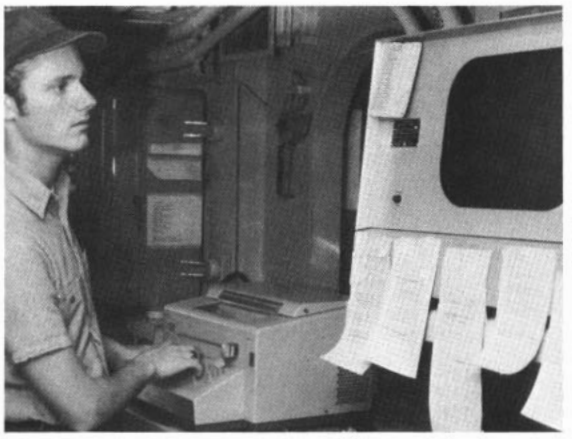
Finding positions and plotting courses aren't the only areas covered by the training program. Whenever the ship enters or leaves port, *Constellation's* young navigators take the helm. As helmsmen, and on the plot, they experience the difficult task of piloting a ship into harbor safely.

DONNIE's new electronic gear increases training time by allowing the 21-man team to carry the load of 29 quartermasters. The new system can compute a fix in 10 seconds. By keying the ship's latitude, longitude, course and speed into the unit's teletype, a more precise fix can be obtained within 30 seconds.

The unit also incorporates a closed-circuit television monitor for visual readouts and automatically locks on incoming satellite broadcasts. Additional monitors on the bridge simplify the officer of the deck's work. He can instantly "see" where the ship is at all times.

Keeping pace with the computerized system has also required improvements in the ship's chart file. Under a Navywide program, all Coast and Geodetic Survey and old Hydrographic Office charts are kept under one listing. Giving them a single, Navy Oceanographic number results in less time spent in locating or revising the charts.

Most quartermasters are reported to be thankful for the extra time. As for the rest of *Constellation's* crew, they find it comforting to know an important ancient science still thrives. —Story and photos by JO3 Paul M. Strickland, USN



Top: The ship's updated satellite tracking system. Above CDR John B. Davis, navigator of USS Constellation, discusses maneuvering problems.

BOTH TRACKS COVER exactly the same material and differ only in the pace of presentation and the amount of redundancy. Only the top 25 per cent of the students are assigned to the fast track. It is estimated that this program has saved the Navy some three-quarters of a million dollars annually.

Some schools at Navy Memphis also use an accelerated program whereby students with a technical background or previous experience are permitted to advance at their own rate through self-study. This is done on a student-by-student basis and is not tied to the fast-track system.

In a computer-managed system, the machine determines which of the units of instruction is best for each student, based on the battery test score from boot camp and his years of education. These modules may be programmed at two or more levels of difficulty, permitting each man to complete the course at his own pace.

The role of the instructor in the CMI version of the Aviation Fundamentals "P" and "A" courses is that of an instructor manager. There is normally no lecture-type instruction, freeing the instructor to help individuals or small groups. The instructor may be called upon to locate material, provide assistance with equipment, counsel, check the use of hand tools and shop activities, and make inputs related to these evaluations. He also makes recommendations to the Trainee Advisory Board as to whether or not a student should be dropped from training. These recommendations are based primarily upon detailed student progress reports which are provided by the computer on a routine basis or upon special request.

The two courses under development are being designed so that the instructor will be aware of each student's progress and will have time for individual counseling.

YET ANOTHER INNOVATION being developed by the CMI is the use of chemically treated paper for testing and feedback. The image appears immediately when the student marks the test paper with a special pen. This permits the tests to be used to speed learning, besides evaluating a student's progress.

CMI personnel were at first apprehensive that many students would resent the use of a computer as a "big brother" approach to learning. But careful surveys of each class have dispelled these fears and an overwhelming majority of the more than 200 men who take the course strongly approve of the system.

A DISCUSSION OF MIL
YOU

ITARY PAY
BE THE JUDGE ....

THERE HAS BEEN A LOT OF PUBLICITY about recent pay raises for military personnel, and along with the publicity there has been a lot of misunderstanding.

Where do we really stand? How well off are we? Have we really made any progress?

We believe the answers are: (1) *Right up there*; (2) *Pretty well;* (3) *Yes.* But you be the judge.

As explained in the December 1971-January 1972 issue of ALL HANDS, 1971 was an important year in military compensation. But so were the preceding years. The progress that has been made since passage of Public Law 90-207 in 1967 has been significant and the Department of Defense considers military pay scales are now reasonably competitive with those in the civilian sector for equivalent levels of work. (See December 1971-January 1972 issue of ALL HANDS for details of Public Law 90-207.)

While we are still short of our goal of equal pay for equal work, we are at least headed in the right direction. Military compensation may not be the favored offspring of our economic society, but neither is it the poor stepchild. Military compensation has evolved to the point where it behooves us all to know how our pay system works, how our pay measures up against the civilian sector, and most important, how each of us *individually* sees his earning power.

Before getting down to cases, let's establish some common reference points. Military personnel do not receive a salary as such. Instead, we receive a combination of pays and allowances which are determined by such various factors as pay grade, longevity, dependency status, certain duties, special skills, or particular circumstances. Out of all these variables, there is a common denominator. The pay we all have in common is Regular Military Compensation (RMC), which Congress has defined as the military equivalent of a civilian salary. RMC is made up of the four elements of pay received by all members: basic pay, basic allowances for quarters and subsistence, and the tax advantage generated by these tax-free allowances.

OF THESE FOUR ELEMENTS, only basic pay is a constant cash payment received in equal amounts by all members of a given pay grade and longevity. Quarters and subsistence allowances may be received in cash or in kind; in order to compute individual RMC, however, cash values should be used. The tax advantage is a real monetary value which is realized in income tax savings. (In other words, you pay less income tax on dollars earned than a comparable civilian.)

RMC—Regular Military Compensation—may be considered the "equalizer." All the other pays are the tangible recognition of the different circumstances under which different members work; they are intentionally created distinctions and should be added to RMC to arrive at *individual salary.* (Allowances, other than for quarters and subsistence, are generally classified as reimbursements for specific purposes and, therefore, not added to RMC.)

Special pays are generally skill-related or related to conditions of service. In this category are *pro pay, VRB, sea pay,* and *hostile fire pay,* to name a few.

Incentive pays for hazardous duty recognize the necessity of inducing personnel to undertake duties of a hazardous nature, such as *aviation, submarine, demolition, parachute jumping, flight deck duty,* etc.

Three points must be remembered in connection with these pays:

(1) They are meant to create differences;

(2) A vast number of personnel may never receive any of them throughout an entire career; and

(3) While our goal of equal pay for equal work can best be achieved by a salary system based on the elements of RMC, special and incentive pays will continue to be required.

THE SO-CALLED FRINGE BENEFITS, such as commissaries, exchanges, and medical care, are not generally included as compensation. While a monetary advantage can be attributed to these benefits, the real value cannot be quantified. The value of a commissary to the nonmarried member subsisting in the general mess cannot be monetarily equated to the value derived by a married member with a large family. Similarly, exchange and medical care benefits will vary with individual circumstances. More important, the value of any of these benefits when they are not available, or available but not utilized, has not been determined.

This is not to say that these benefits are to be dismissed. On the contrary, they are valuable benefits which each member must assess for himself.

YOU BE THE JUDGE

There is no easy formula for determining how much individual value should be attached to any fringe benefit, or how much savings actually accrue. The value depends on family size, income class, availability of and access to facilities, and individual family and consumption preferences. Because of the magnitude of the differences involved, applying a fixed price to these benefits is a risky affair. Rather, these benefits must be considered as a means of helping actual compensation dollars go further.

IN OUR ENLISTED EXAMPLE, we have Hull Maintenance Technician 2nd Class Smith with over four years of service. (This example was not selected because it is "typical," but rather because it points up the differences which can occur due to personal circumstances. You must adapt this guideline to meet your own personal situation.)

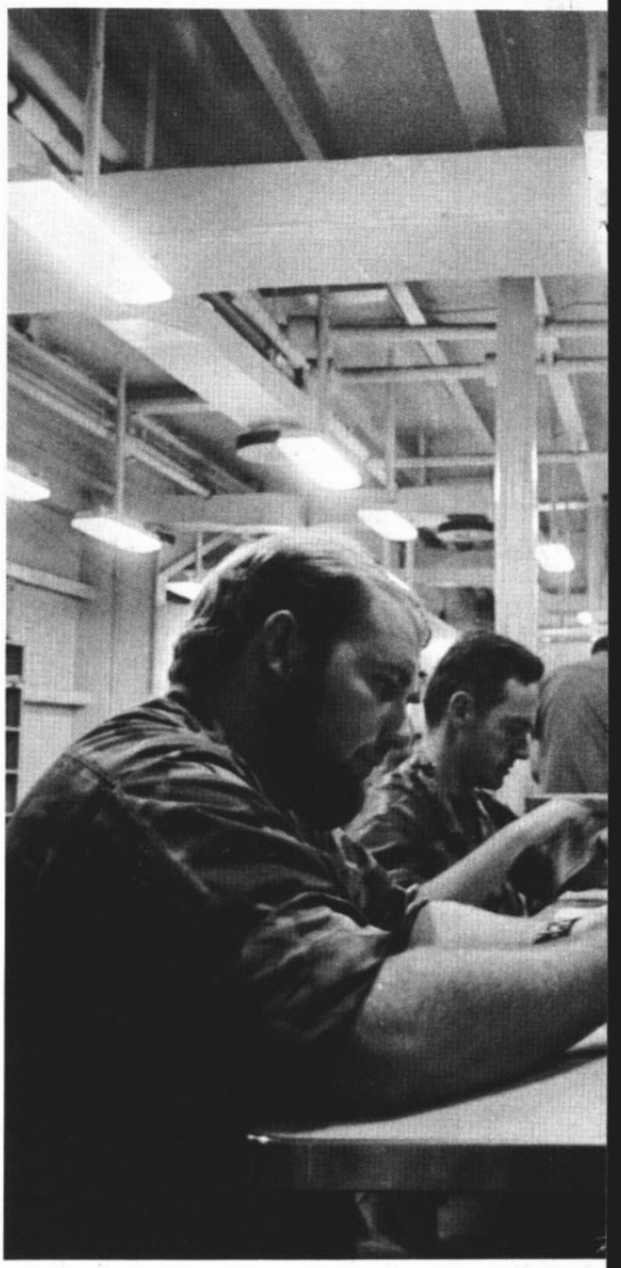
At the end of his first enlistment (four years), he immediately reenlisted for four years on 5 Jan 1972 and elected annual installments of VRB; he is eligible for and receives pro pay. Petty Officer Smith is on sea duty, homeported in Charleston, S.C. He is married, has two children and is expecting another in June. They live off-base in a small rented house.

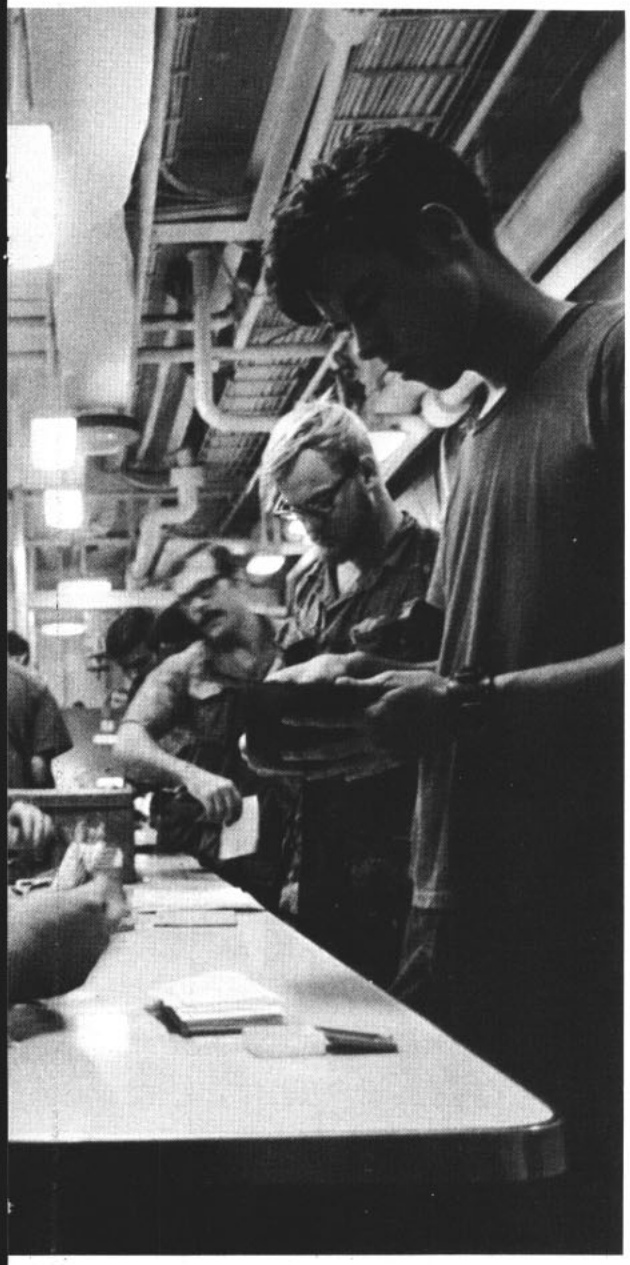
Petty Officer Smith's pay is itemized in two ways: as RMC (i.e., personally adjusted income) and as take-home pay (i.e., "spendable" income).

RMC		
Basic Pay		$ 5,151.60
BAQ		1,663.20
BAS (COMRATS)		532.90
Tax Advantage		405.00
RMC*		$ 7,752.70
Sea Pay		192.00
Pro Pay		1,200.00
Regular Reenlistment Bonus (Total)		1,717.20
VRB (Annual)		1,717.20
Personally Adjusted Income		$12,579.10

*Add to RMC any additional pays received to arrive at personally adjusted income.

TAKE-HOME PAY		
Basic Pay		$ 5,151.60
BAQ		1,663.20
Sea Pay		192.00
Pro Pay		1,200.00
Regular Reenlistment Bonus		1,717.20
VRB		1,717.20
Cash Pay Total*		$11,641.20
Less Deductions:		
FICA	$267.85	
Withholding Tax	979.80	
SGLI	36.00	
		1,283.65
Net take-home pay		$10,357.55





There is nothing more misleading than to be told the "average E-5" makes so many dollars or the average member can save 30 per cent by shopping in the commissary. Who is "The Average?" Does he exist?

Unfortunately, the aggregate of individuals makes up the average without ensuring that any one individual actually fits that average. For this reason, no attempt is made to develop one. Rather specific examples are provided as guides so each individual can devise one to fit his own circumstances.

To the foregoing computation Petty Officer Smith may want to add such allowances as FSA or uniform allowance; however, since these allowances may be considered "reimbursables," it is not necessary.

PETTY OFFICER SMITH'S personally adjusted income of $12,579.10 is applicable only so long as he continues to receive the special pays listed; however, he can look forward to longevity increases, advancements, and annual pay raises. (Note: because he elected to receive the regular reenlistment bonus in a lump sum, his annual salary after this year will no longer include it).

A Federal Service Wage Board 10, Step 3 Shipfitter receives a salary of $10,067 in Washington, D. C. According to the Shipfitters' Union, the following wages prevail in these designated cities: New York–$16,879; Washington, D. C.–$14,747; Los Angeles–$9,859. These salaries are representative of the over four-year experience level and can be equated to Petty Officer Smith's personally adjusted income.

Comparable civilian take-home pays are as follows:

	WB-10 Washington, D. C.		Union Washington, D. C.	
Salary		$10,067		$14,747
Less deductions				
FICA	0		468	
Withholding	1,097		1,897	
Retirement	705		312	
Union Dues	0	1,802	132	2,809
Net take-home Pay		$8,265		$11,938

Civilian salaries can further be influenced by overtime and pay increases.

Petty Officer Smith and his family make extensive use of base facilities, and have determined that they get more value per dollar spent than if they utilized civilian facilities exclusively. They do not view increased value as increased income, but rather as a means of enabling them to live within the budget they have set up. With the baby expected in June, Petty Officer Smith does not have to worry about the medical expenses involved. He also considers as a

"plus" the shots, medication, and routine sick call/emergency treatment he and his family receive.

ON THE OTHER HAND he considers it a "minus" that he pays $170 per month rent instead of living in government quarters for $138.60; he also considers it a "minus" that he/his wife must drive 16 miles a day round trip to and from the base to utilize the facilities/services. However, on balance, he figures he is doing pretty well.

In our officer example, we address a line lieutenant with over four years of service. Lieutenant Jones is shore-based in Long Beach. He is married and has two children; they live in quarters. As with Petty Officer Smith, Lieutenant Jones' pay is itemized in two ways—RMC and take-home pay.

RMC		
Basic Pay		**$11,127.60**
BAQ		**2,347.20**
BAS		**574.56**
Tax Advantage		**652.00**
Total RMC*		**$14,701.36**
***Lieutenant Jones receives no special pays.**		
TAKE-HOME PAY		
Basic Pay		**$11,127.60**
BAS		**574.56**
Cash Pay Total		**$11,702.16**
Less deductions		
FICA	**$ 468.00**	
Withholding	**1,207.20**	
SGLI	**36.00**	
		1,711.20
Net take-home Pay (with housing provided)		**$ 9,990.96**

Being a "black shoe" line officer, (with housing provided) LT Jones does not anticipate receiving any special pays; however, he can anticipate longevity increases, promotions, and pay raises. LT Jones and his family make considerable use of base facilities.

LIKE PETTY OFFICER SMITH'S FAMILY, the Joneses believe they get more value out of dollars spent than comparable civilians do. They particularly enjoy living in quarters and having the various facilities readily available. We equated LT Jones with a Personnel Director (Level 1) in civilian industry and a General Schedule Civil Service Personnel Director, GS-11 Step 2, because these individuals are representative of the four-year experience level.

Comparable civilian take-home pays are as follows:

	GS-11 Step 2		**Civilian Industry**
Salary	**$13,753**		**$13,730**
Less deductions:			
FICA	**0**	**468**	
Withholding	**1,670**	**1,670**	
Retirement	**963**	**0**	
	2,633		**2,138**
Net take-home pay (without housing)	**$11,120**		**$11,592**

It is reemphasized that these examples are not representative; they are merely illustrative of the various compensation items which comprise "salary." In the final analysis, you are the judge.

The list of fringe benefits provided below is not all-inclusive, but it should help you in assessing their value. You must be the judge as to what these benefits actually mean to you; you must decide how many saved dollars, if any, should be added to your RMC; and finally, you have to judge if these benefits are comparable to civilian industry.

Fringe Benefits of Military Service

Commissaries (Not always available)

Commissary sales stores sell groceries and related items at prices which are approximately 20 per cent lower than those prevailing in local commercial grocery stores.

Exchanges (Not always available)

Exchanges provide a wide range of consumer goods and services to military personnel and their dependents when they are available. Includes easy-to-forget services such as barbershop, beauty shop, TV and watch repair. The conditions under which exchanges operate result in prices that are comparable to those available by careful shopping at large discount stores in the local community.

Exchange Service Stations (Not always available)

Provide members stationed at a military base with the convenience of a service station. Significant savings result, particularly in gasoline, where prices range from three cents to eight cents a gallon less than the price of major brands in the local area.

Recreation Facilities (Not always available)

Military personnel may have free access to or pay nominal costs for a wide range of social and athletic recreational facilities found in a well established community, such as libraries, athletic fields, gymnasiums, swimming pools, recreation halls, various clubs, and base theaters.

Education/Training

In addition to on-the-job training, military personnel may receive formal education or training at no or nominal cost.

Leave, Holidays, Sick Leave

Military personnel, regardless of length of service, earn 30 days' leave annually, and an unspecified amount of sick leave equivalent (normally in hospitalization or limited duty). Leave is not required for sick call, outpatient care, physicals, etc.

Service Personnel

Military personnel receive complete health care, including dental care and eyeglasses from military doctors in military facilities.

Dependents

Dependents of military personnel receive military health care except dental care, eyeglasses, treatment of chronic illness, and nervous disorders, within the capability of military doctors and facilities. Additionally, they may utilize the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS).

Social Security

Military personnel are fully covered under the Federal Old Age Survivors and Disability Insurance Systems. FICA (Federal Insurance Contributions Act) contributions are payable in equal shares by the service member and the Government. The Government share of the contribution during calendar year 1971 was 5.2 per cent of the first $7,800 of basic pay; in 1972, it is 5.2 per cent of the first $9,000 of basic pay.

Retirement

The military member receives no retirement benefits until he is in fact retired. Retirement pay is computed as follows: 2½ per cent X Basic Pay X years of service creditable for retirement purposes. The Department of Defense and the House Committee on Armed Services are in agreement that military pay is depressed 7 per cent in recognition of the fact that the member makes no *explicit* retirement contribution. Since retirement contributions are *implicit*, members have no entitlement rights until they attain retirement eligibility. Thus, this benefit is applicable only to full careerists.

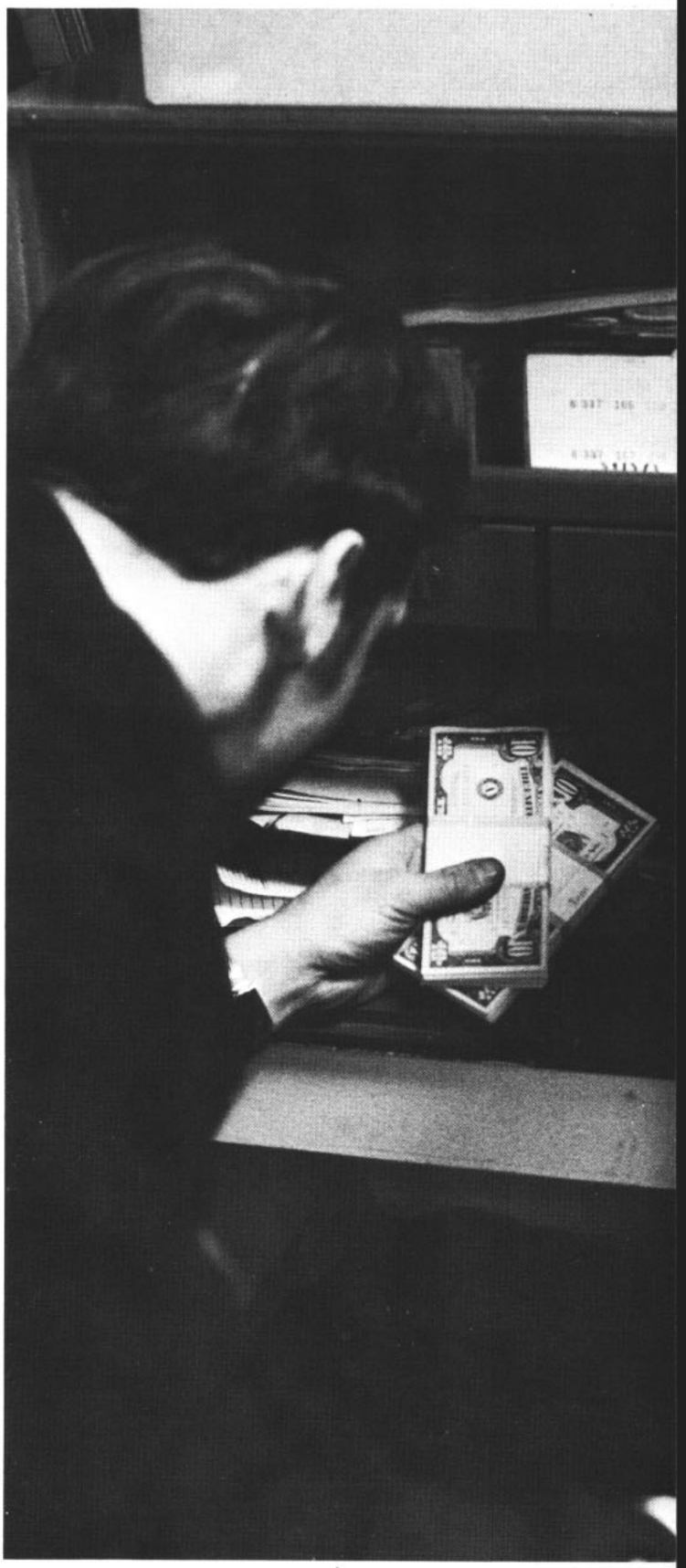
Dependency and Indemnity Compensation

Dependency and Indemnity Compensation is payable to the survivors of military personnel who die in line of active duty or following service if death is a result of service-connected disability. The amount payable is based on the individual's pay grade at time of death.

Death Gratuity

When a member dies, eligible beneficiaries are entitled to receive a lump-sum death gratuity equal to six months' basic pay plus incentive and special pays (including proficiency and hostile fire pay) at the rate to which the decedent was entitled on the date of death, but not less than $800 nor more than $3000. (Under the present pay scales, the minimum is $1728.) Immediate payment, within 24 hours, if possible, is made.

Those are the facts. You be the judge.



GENERAL CONSENSUS at NAS Corpus Christi, Tex., is that commissary patrons like the present hours of operation; would not consider using credit cards if available; and are able to find all the items they intend to purchase on a single shopping day.

The local survey also showed that the majority of customers are passing up additional savings by not redeeming commercial food coupons. Many patrons are not aware that these advertising coupons may be used. Those who do not know about them, though, don't bother to take advantage of them.

"Cashing in coupons at the Commissary would still mean too much trouble," said one customer, "because they hold up the checkout line."

It would be no contest to compare the local comissary with local civilian markets. Shoppers noted they saved as much as $50 in a month; this is perhaps the most important benefit for a Navy family. An average savings of approximately 30 per cent is enjoyed by most patrons, according to the survey.

Can the military manage to sell food goods at such a low price, yet at the same time, maintain a stock of high quality, brand-name items? It certainly can. For example, vegetables are brought to Corpus Christi three times a week from San Antonio. Popular organic and gourmet foods also can be found on the shelves. The store stocks nearly 4000 items.

"Once in a while they'll run out of a particular product," a customer said, "but I know I can come back in a day or two and find that item back on the shelf. I seldom go downtown to get what I need.

ONE HOMEMAKER, on the other hand, had complained about the packaging of meat products. "I work in a food store outside the Naval Air Station and I noticed that meat was packaged in double styrofoam trays. Customers, there, were paying for the styrofoam too, not just the meat. The Commissary packs meat in double styrofoam trays, too."

The COMMISSARY

By and Large a Satisfied Clientele

When this complaint was brought to the commissary store's sales floor supervisor, he explained that the double styrofoam tray was not used to increase the weight of the package. Instead, it insures that meat juices will not leak through the tray, as is sometimes the case when trays are used singly.

He explained that all products are weighed prior to being packaged. Then the item is sent through a special wrapping machine which determines whether or not two trays will be needed. If the meat needs two trays, the machine will stop, and an adjustment will be made. Exit another satisfied customer.

The President's Price Stabilization Program also affects military commissaries. Under Phase II the only price increases allowed are those resulting from a manufacturer's higher production costs.

PATRONS OF THE MILITARY COMMISSARIES, like that at Corpus Christi, often inquire why meat products could sometimes be more expensive than in civilian markets. This may be attributed to a deliberate loss policy of a commercial store to attract more customers who could very well purchase more items that will produce an offsetting profit.

It is also possible that commissary meat prices might exceed the prevailing supermarket price because of a sudden dip in the commodity's market, leaving the commissary holding the line against loss by selling meat at its acquisition cost. Commercial stores are not as restricted.

The sole purpose of NAS Commissary Corpus Christi, like that of any Navy commissary, is to give the patron more for his shopping dollar and keep him satisfied. Any complaints concerning the store, products, or employees are aired through the station's Commissary Action Line.

"We used to get several calls each week," said a commissary official, "but nobody seems to use it anymore. Instead, they usually stop by the store when they have a question to ask."

—Story by JO3 Mike Chartier
Photos by PH3 Ron Ridley

PILOT PROGRAMS

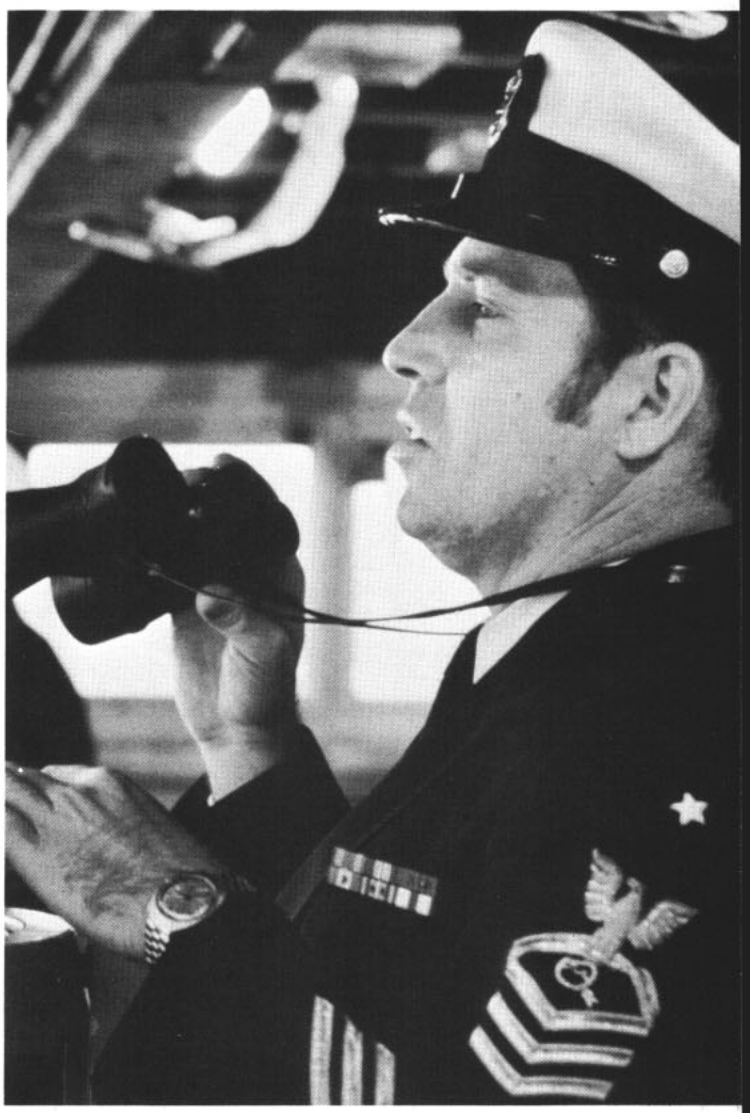
ACCORDING TO CHARLES DARWIN'S famous principle of "survival of the fittest," the organisms most likely to survive in the world are those which have the ability to adapt to their environment by continually changing with corresponding changes in their surroundings. This principle holds true for organizations as well as organisms and is particularly relevant in an age, like the one we're living in today, in which the rate of change is so much greater than in previous times. Thus it can be seen that the relevance, effectiveness and, ultimately, the survival of an organization in today's world is highly dependent upon its capacity to withstand—and even initiate—change.

The Navy is no exception to this rule. Changes must be continually made—or at least considered—in order to stay in tune with the total environment in which the Navy operates: more modern weapons systems and methods of deployment accompany advances in technology; strategic and tactical defense postures are constantly reviewed in terms of the prevailing international situation; and changes in personnel policies and practices are designed to make adjustments for changing attitudes in Navy people and the American as a whole—just to name a few.

BUT CHANGE IN ORGANIZATIONS doesn't just happen by itself—it's created. And, in most cases, changes in specific areas are made—or at least originated—by specialists in a particular area or by people who would be most affected by it. Engineers and technicians develop new and more effective weapons systems; high-level military planning experts review our defense posture; and individual Navy people often suggest changes which might improve Navy life (which, it should be noted, is the principle underlying the creation of Retention Study Groups: see ALL HANDS August 1972 issue).

The capacity for change is an important factor in an organization's survival but, again like the organism, so is stability. Too much change too fast—which causes what is commonly called "future shock"—can be just as fatal as no change at all. What is needed

Progress Report on Navy's Experimental People Projects



then is an effective and realistic balance of change and stability—one which results in evolution rather than revolution.

A MAJOR PART of the Navy's answer to this need, particularly in the area of personnel policies and practices, is the *pilot program*. Contrary to what you might expect from the name, a pilot program isn't a school or training schedule for teaching people how to fly airplanes, but rather is a basic concept which is used to test suggested changes or recommendations in terms of feasibility of their Navywide application.

The pilot program is basically an experiment, a trial run testing proposed changes which are too complex —in terms of such factors as time, manpower, money, and attitudes of people who would be affected—for a snap decision, either pro or con. By studying a recommendation on a limited, but representative, scale—in relation to the number of people affected, the time needed for evaluation, and resources required—the pilot program represents an economical, yet accurate, means of determining the probable effect a particular change would have on the Navy as a whole.

In essence, pilot programs are conducted to answer questions such as:

- *Is the proposed change really necessary and desirable?*
- *Would such a change require a new formal program, or could the recommendation be incorporated into the already existing system?*
- *What resources would the change require, and are they available?*
- *Is this particular recommendation the most effective method of reaching a desired goal?*

And—often most important—what do those people who would be most affected think of the change?

BASICALLY, here's how the pilot program concept works. Once a decision has been made, usually by the Chief of Naval Operations, that a proposed change warrants a pilot study, responsibility for and supervision of the study is assigned to cognizant authority

in that particular area. (For example, a recommendation involving enlisted detailing procedures would be studied by the Enlisted Personnel Control Branch of the Bureau of Naval Personnel.)

Guidelines are then established to determine the most effective method of studying the proposal, including selection of a representative segment of the Navy population, setting certain time limits, and devising a method to evaluate feedback. When adequate results have been obtained, the person or group who conducted the study submits a recommendation, on the basis of these findings, to the CNO as to whether this particular program should be expanded Navywide, discontinued, or perhaps tested again with some variations.

Not all of the recommendations which become subjects of pilot studies are adopted for Navywide application—a fact which, in effect, confirms the true value of pilot programs as valid testing procedures. It should be noted, however, that the proposals which "fail" these trial runs are not necessarily useless or unrealistic ideas, but rather that their usefulness or feasibility may be limited to only a specific Navy community or situation.

Pilot programs are nothing new in the Navy—they've been around for quite some time, although perhaps referred to by a different name. But rarely, if ever, have so many pilot programs been initiated within such a short time—50 have been started within the Bureau of Naval Personnel alone during the past two years. This is greatly, though not completely, attributable to the enormous number of recommendations which have come from retention study groups. (See ALL HANDS, August 1972, page 2, for a roundup report on RSGs.)

THE TIME REQUIRED to complete a pilot program varies with the proposal under study. Of the 50 pilot programs conducted by BuPers, approximately one-third have been completed—some of which have

PILOT PROGRAM CHART

Name	Originating Directive	Date Started	Pilot Program Completed	Results	Pertinent Directive
Aviation Early Command	CNO/VCNO Action Sheet 911-70	MAR 71	Ongoing	Adopted	Officer Personnel Newsletter (March 1971)
Human Relations School for Detailers	CNO/VCNO Action Sheet 714-70	FEB 71	OCT 71	Adopted with revisions	None
Guaranteed Assignment Retention Detailing	BuPers Notice 1133 (5 Feb 1972)	FEB 72	JUL 72	Expanded Navywide	BuPers Notice 1133 (20 Jun 72)
Officer Swaps	CNO/VCNO Action Sheet 386-70	NOV 70	AUG 71	Swaps authorized but discontinued as a formal program	NavOp 301439Z/ 145 (Aug 71)
Enlisted Meritorious Advancement	CNO/VCNO Action Sheet 133-70	AUG 70	MAY 72	Expanded Navywide	BuPers Notice 1133 (20 Jun 72) Z-Gram 53 (2 Nov 72)
Annual Officer Billet Summary	CNO/VCNO Action Sheet 421-70	SEP 70	Ongoing	Adopted and continuing in same form	
Trial Selection Billet	CNO/VCNO Action Sheet 421-70	APR 71	APR 72	Discontinued due to small response and impracticability	None
"Hard Rock" Clubs	CNO/VCNO Action Sheet 236-70	DEC 70	SEP 71	Adopted, and open to expansion	Manual for Messes Ashore (NavPers-15951)
Technical Officer Management Training	ComNavShips ltr 5 Jan 1971	APR 71	Ongoing	Adopted	OPNAV Note 1520 20 Apr 72
Early Command Opportunity	CNO/VCNO Action Sheet 911-70, 745-71	MAR 71	Ongoing	Adopted and expanded	Officer Personnel Newsletter (March 1971)
Correctional Counselors Aboard A Ship	CNO/VCNO Action Sheet 686-70	JAN 71	DEC 71	Discontinued due to budgetary and manpower limitations	None
Drug Education Program		JUL 71	FEB 72	Adopted	BuPers Inst. 6710.1
CARS/CARSO	NavOp 151819Z/73 (14 Jul 71)	SEP 71	Ongoing	Adopted	BuPers Notice 1040 (22 Jun 70)

NOTE: Look for more reports on other Pilot Programs as they complete their testing periods.

been discontinued, others resulting in changes in Navy policy. Here is a rundown on BuPers pilot programs which have been completed to date. Other pilot programs will be covered in future issues of ALL HANDS.

• AVIATION EARLY COMMAND

One of the first pilot programs to be conducted—and soon afterward continued as regular Navy policy—was that which tested the concept of affording aviation squadron command at the lieutenant commander level. Since mid-1971, four fleet tactical aviation squadrons have been under the command of LCDRs who, when their tours are completed, will be relieved by their respective executive officers who were also screened and selected for early squadron command. This program is being continued as part of CNO's policy to expand early aviation command opportunity to 15 per cent in all warfare communities. The FY-72 Aviation Command Screen Board selected early command candidates in all aviation warfare communities.

• HUMAN RELATIONS SCHOOL FOR DETAILERS

Designed to evaluate methods for improving detailers' relationships with their constituents, this pilot program involved eight detailers who attended different person-to-person communications courses under the adult education program in northern Virginia schools. At the same time, BuPers established a similar course and a separate detailer indoctrination curriculum for comparison. Since outside courses were often inconvenient to attend and in-house talent was available to conduct such a course—and tailor it to fit the needs of detailers in BuPers—it was decided that an in-house detailer indoctrination course would be conducted quarterly, and a person-to-person communications course would be held about every six months.

• GUARANTEED ASSIGNMENT RETENTION DETAILING

Between February and July of this year, men in the FT and GM rates were the subjects of a pilot program evaluating the effect of guaranteed assignment detailing as a reenlistment incentive. This program, conducted by the FT/GM detailing section in BuPers, drew such favorable response from men in these rates and their commands that, as of 1 July, the GUARD program was expanded Navywide (see BuPers Notice 1133 of 20 Jun 72).

• ENLISTED MERITORIOUS ADVANCEMENT PROGRAM

There are career personnel in the Navy with outstanding performance records who have been unable to advance through the normal channel of Navywide competitive examinations. This realization was the basis for a pilot program exploring the feasibility of meritorious advancement for topnotch 1st and 2nd class petty officers who have participated in at least five advancement exams (three of which must be within the last five held)—but not been advanced. A Meritorious Advancement Selection Board was convened to select some 100 1st class and 100 2nd class from those best qualified among all the nominees for meritorious promotion. On the basis of the pilot program's success, the Enlisted Meritorious Advancement Program is being continued annually on a Navywide basis.

• OFFICER SWAPS PROGRAM

An idea originated by the Junior Officer Retention Study Group resulted in a six-month pilot program which tested the feasibility of establishing a formal exchange of duty program for officers. Under the pilot program, officers—with the exception of COs, XOs, department heads and people in certain other situations—who requested a no-cost swap were assisted by BuPers in finding another officer with whom they could exchange duty. Response to the program was limited and most of the successful swaps were those in which officers had already identified their swap, so no formal program was established. Officers may still exchange duty, however, by submitting requests to the Chief of Naval Personnel once they have identified their own eligible swap.

• ANNUAL OFFICER BILLET SUMMARY

To give officers a better idea of what billets are available, thereby helping them to prepare more meaningful and useful duty preference cards, a pilot program—in the form of a listing of all officer billets—was started. It wasn't long after the first edition appeared—and drew an overwhelming response—that it was decided to publish these summaries on a regular basis. The second edition (which appeared last spring) was divided into a Junior Officer (LT-WO) edition and a Senior Officer (CAPT-LCDR) edition and was classified "for official use only."

• TRIAL BILLET SELECTION PROGRAM

This program tested a more specific and complicated officer assignment process than that described above. Whereas the officer billet summary provided a listing of all officer billets in existence, this program provided a "shopping list" of high interest officer billets to determine the feasibility of having officers request specific billets based on availability. Response to this program was surprisingly low and, because it also presented further complications in the detailing process, it was discontinued.

• "HARD ROCK" CLUBS

Five "hard rock" clubs were established at five different naval installations near the end of 1970 to permit junior officers to organize officers' open messes in a manner more responsive to their needs. The idea went over pretty big, so the Manual for Messes Ashore was revised to authorized the establishment of Junior Officers' Messes as annexes to Commissioned Officers' Messes Open. Establishment of "hard rock" clubs is determined on a local level, subject to approval of the Chief of Naval Personnel.

• CARS/CARSO PROGRAM

An acronym for Country, Area, or Regional Specialist/Country, Area, or Regional Staff Officer (see Navy News Briefs section in ALL HANDS, August 1972), this program was designed to encourage specialization of officers who already have an extensive background—including such things as language qualifications, academic training or practical experience—in a particular country or region, and to further the development of officers with significant, but incomplete, qualifications for this specialization. Overall success of the pilot study has resulted in continuation of the CARS/CARSO program.

• TECHNICAL DUTY OFFICER MANAGEMENT TRAINING

In the past, the normal three-year curriculum of postgraduate education for engineering duty officers was all in technical disciplines. Due to the findings of a pilot program for engineering officers, postgraduate education for many technical categories now contains a program of two years of technical education and one year of management education and is referred to as the Dual Masters Program.

• EARLY COMMAND OPPORTUNITY

The success of Destroyer Squadron 26's "Mod Squad" led to a decision to expand the concept of early command opportunity throughout the Navy. Under this program, commanding officers, executive officers, and department heads of certain ships are all junior to those usually assigned to such billets. It is expected that about 25 per cent of surface warfare "commander commands" will eventually be skippered by lieutenant commanders in various squadrons throughout the Navy.

• CORRECTIONAL COUNSELORS ABOARD SHIP

USS *America* (CVA 66) and *Constellation* (CVA 64) were selected to evaluate the idea of having correctional counselors available aboard ships to help people with family problems, those having trouble adjusting to Navy life, and others creating unrest and dissatisfaction. Commanding officers of both ships gave high praise to the pilot program and recommended that it be continued on a full-time basis; due to budgetary and manpower limitations, however, full-time correctional counselor billets aboard ships are not considered feasible at this time and have not yet been established.

• DRUG EDUCATION PROGRAM

A series of pilot programs was commenced in mid-1971 to develop an overall educational approach to the drug-abuse problem in the Navy. As a result, a unit-level, multimedia educational program is currently being implemented Navywide to cover active-duty forces by spring 1973, the active Reserve forces by early summer 1973, and dependents of naval personnel by fall 1973.

—JO2 Jim Trezise

Equal Rights & Opportunities for Women

Z-Gram 116 Initiates New Actions, Plus A Pilot Program Providing Women an Opportunity to Serve in USS Sanctuary

AS ALL HANDS WENT TO PRESS, Z-gram 116 announced the establishment of a task force to check the laws, regulations and policies that will have to be changed to eliminate inequities and open up opportunities as they relate to women in the Navy. Citing the imminence of an all-volunteer Force and at the same time noting the changes that would follow enactment of the Equal Rights Amendment (which has now been ratified by 20 of the required 38 states), CNO specified some of the first steps that could now be taken and others that would require changes in current laws and Navy regulations regarding women.

A "pilot program" is now being established which provides for the assignment of officer and enlisted women to serve aboard the hospital ship USS *Sanctuary* in order to gather planning information "regarding the prospective increased utilization of women at sea." While women in the past have served aboard both hospital and Navy transport ships, they have been restricted by Federal law from serving on other Navy ships. The pilot program utilizing USS *Sanctuary* is expected to begin in early 1973. (For more on pilot programs, see page 38.)

Stating that while "women in the Navy have historically played a significant role in the accomplishment of our naval mission," CNO said, "we can do far more than we have in the past in according women equal opportunity to contribute their extensive talents and to achieve full professional status."

One of the major actions to be taken, in addition to the enlisted ratings that have recently been opened to women, is to authorize "limited entry of enlisted women into *all* ratings." In this connection, the Chief of Naval Operations envisioned the possibility that the number of women in the Navy, now approximately 9000 (including 6000 WAVES, might be doubled, or tripled. "We must be in a position to utilize women's talents to help us achieve the size Navy we need under an all-volunteer force environment," CNO said.

Z-gram 116 also announced the opening up of all branches of the staff corps to women, including the Chaplain and Civil Engineer Corps, which previously have had no women assigned.

IN ELIMINATING the pattern of assignment of women exclusively to certain billets, the Z-gram states that they may be qualified for the full spectrum of challenging billets, including those of briefers, aides, detailers, placement and rating control officers, attaches, service college faculty members, MAAGs and missions, senior enlisted advisers, executive and special assistants to flag officers, as well as to flag rank itself. In the latter regard, action is being taken to offer various paths of progression to flag officer within the technical/managerial field in the same manner as for male officers.

Beginning in fiscal 1974, the Navy plans to accept applications from women for all NROTC college campuses. At the present time they may be enrolled as NROTC midshipmen at four colleges and universities. (See ALL HANDS, July 1972 issue.) They will also be considered for selection to joint service colleges, including the National War College and Industrial College of the Armed Forces.

In announcing the actions to promote equal opportunity, Z-gram 116 set the goal to ensure that women are more equitably included in our "One-Navy" concept.

Below left: The hospital ship USS Sanctuary as she looked in 1966 steaming down the Mississippi. She has since been taken out of commission and is undergoing conversion at Hunters Point, Calif. Right: Navy men and women on liberty enjoy the view of San Francisco Bay.

from the desk of the Master Chief Petty Officer of the Navy

"Lead Links"

MCPON JOHN D. WHITTET

GLITTERING generalities cannot hide the fact that Navy men and women are sometimes promised one thing and receive another. In spite of the efforts of many dedicated, energetic and enlightened personnel, the "system" does not always work as advertised.

When this type of "gap" does in fact happen, all too often the problem can be traced to what I call a "lead link." Though difficult to describe, the lead link is usually someone within the chain of command who just isn't trying hard and is often critical about many of the changes that have taken place in recent years. Someone who lacks that quality of concerned leadership that is so very important today.

Unfortunately, it only takes one lead link in the chain to stymie the effectiveness and credibility of our efforts to humanize the Navy. Some lead links have reached the point where they just don't give a damn any more. As a result, many a sailor is led to believe that the whole Navy is this way, that Z-grams do not really matter and that all of our talk about enlightened leadership is just talk.

It is up to each one of us to join the team and become an active member of the finest Navy to come along in many a year. No chain can ever be stronger than its weakest link. The Navy can only be as good as Navy men and women make it.

FROM SHORTENED SEA TOURS to extended commissary hours, a great many promises have been made in the past few years. Many, in fact, have been kept; others have yet to be fulfilled. Now I am not going to give you a list of excuses. I will tell you that there are thousands of Navy men and women who are laboring earnestly and creatively to make it all come true. Because of this, things are happening that would not otherwise have happened. Promises are being fulfilled. Communication and understanding up and down the chain are improving. Navy life is getting better for all of us.

The problem with the lead link is that he doesn't really try. He is not willing to put forth the time and effort necessary to weigh each case carefully and with proper respect for the desires, dignity and self-esteem of the individual involved. It is this fact—that we don't always effectively utilize our potential to the fullest—that bothers me. We all know what can be done when there is a willingness and desire "to get with the program." We have often seen the results.

Many of our promises and programs could be better fulfilled if more thought were given to planning and coordination by cognizant leaders Navy-wide. Take leave for example. It is quite important to take leave when you need it or when you want it. If someone would like to take his leave at a time when a number of others are scheduled for leave, the "can't-spare-you" situation can often be overcome by a willingness to shuffle and reschedule. Better yet, the enlightened leader can anticipate this kind of conflict and, with a little prior planning and coordination, can often avoid such a problem. If nothing else, an attitude and atmosphere of cooperation and concern will usually ease the pain a bit.

IT MUST BE REMEMBERED that those who "look up" the chain and *demand* enlightened leadership from their superiors must also "look down" the chain and *supply* the same to their subordinates, who have every right to expect it.

Whenever possible, the decision-maker should decide in favor of the man or the woman. My experience has demonstrated that it is sometimes better, in the long run, to "suffer" a little operationally for the sake of worthy individuals. When you think about it, the Navy has no greater need than its need for individuals who know what they are doing, feel good about it and can complete a task in a competent and efficient manner. This is the goal of our current people policies and the very core of pride and professionalism.

I strongly believe that our "people programs" are worth the effort if we will only put forth the effort. Like most other things in life, you get out of them just about what you put into them. If there is a place in life for those who are unconcerned, it is not in this man's Navy! Don't be a lead link. Step forward and join the team. Give a damn! You will be rewarded with a better Navy —— and that's a promise!

• ENLISTED SHORE DUTY BILLET SUMMARIES NOW AVAILABLE

If you've been wondering where the shore duty billets are for your rate and rating, you needn't wonder any more -- all CONUS and overseas shore billets for all ratings are listed in BuPers Notice 1306 (1 Jul 72). Some changes in billets occur every day, but this listing still provides you with a good "shopping guide" of shore billets. This summary indicates billets currently in existence -- not vacancies; some billets will become vacant soon; others may not be available for two years or more. For specific information about the availability of a particular billet in which you're interested, contact your detailer in BuPers.

• CODE-A-PHONE SET UP IN ENLISTED LIAISON BRANCH OF BUPERS

The Enlisted Liaison Branch (Pers-P22) now has a CODE-A-PHONE for accepting telephone inquiries from Navy people, their dependents or other involved persons during hours when the office is not staffed. The function of Pers-P22 is to provide an avenue of communications and recourse to

TIDES AND CURRENTS:

A Message to the Fleet

VADM D. H. BAGLEY

ONE OF THE MOST INTERESTING of many ideas that are making Navy life more challenging, stimulating, and educational is that of homeporting additional United States Navy ships overseas. Many Navymen have expressed the thought that they and their families would like to travel more and see more of the world together. The Chief of Naval Operations has been receptive to this idea and has persuaded authorities in our country and elsewhere that homeporting Navy ships overseas is in the best interest of both countries. This action gives visible proof of our commitment to our allies as well as equally visible proof of the interesting life that is open to the Navyman and his family.

In the March issue of ALL HANDS you read about the squadron of destroyers that has been assigned extended deployment in Yokosuka since November 1971. In addition to the families of more senior petty officers, some families who were not normally entitled to moves at government expense were transported to Yokosuka by **USS Samuel Gompers** (AD 37). Commander Destroyer Squadron 15, Fleet Activities Yokosuka, and many other commands in the area provided the families with strong helping hands in getting settled into their new quarters and adjusting to the new way of life in Japan.

In sunny Italy, the Navy has two PGs, three DEs, an AD, and an air transport squadron, and a significant staff contingent homeported in Naples. There have been Navy units in Naples since the end of World War II and housing, schools, a large exchange and a commissary are available. Also, we have a submarine tender stationed at Holy Loch, Scotland, and another at Rota, Spain.

On 1 Jul 1972, the staff of Commander Carrier Division Two changed home port to Athens, Greece,

people who have exhausted all such efforts at the local level. Representing the Navy's Ombudsman, Rear Admiral C. F. Rauch, Jr., this office tries to help individuals as much as possible and to advance a people-oriented atmosphere within the Navy. To reach the Enlisted Liaison Branch (Pers-P22) during normal working hours (8 a.m. until 4 p.m. EST), call (commercial) 202-OX4-3701 or (autovon) 224-3701. During non working hours, call (commercial) 202-OX4-5211 or (autovon) 224-5211.

• GUARD PROGRAM EXPANDED NAVYWIDE

Due to the very favorable results of the pilot Guaranteed Assignment Retention Detailing (GUARD) Program for fire control technicians and gunner's mates, the GUARD Program is being expanded Navywide to eventually include all ratings. This means that if you are within 10 months of your EAOS and completing between four and 10 years of service, you may be eligible to receive a specific duty assignment as a reenlistment incentive. Various ratings are being phased into the GUARD Program according to a specific schedule; how-

and a Fleet Support Office was established for dependent support. In a few months, a six-ship destroyer squadron will also be homeported in Athens. As usual, arriving Navymen and their families will find others before them charged with the job of providing a helping hand. Commander Cruiser-Destroyer Force, Atlantic Fleet, has formed dependents' assistance teams in Newport, Norfolk and Charleston to assist the families who will be moving to Athens in connection with the overseas homeporting of the destroyer squadron. The Fleet Support Office in Athens is tasked to help settle families in Greece.

WHEREVER IT IS PRACTICAL, it is intended to encourage sharing of the life experiences of the Japanese, Italian, Spanish and Greek families who will be both the hosts and the neighbors of our Navy families. Considerable attention is being paid to predeployment briefings and to assistance with language training, cultural attitudes in other countries and an accurate understanding of living conditions in the overseas home ports in order to assist families in adapting to their new stations. Dependent children will be able to attend American schools from kindergarten through high school grades. These schools possess excellent records for having their graduates accepted at the college of their choice. Most of the factors affecting students in these schools are very similar to those of schools in the United States, with the added advantage of being able to learn from real experience about life in a foreign country.

Navymen and their families stationed in Greece will be able to take advantage of the many attractions and services available in the vicinity of Athens, a modern city of over 2 million persons. There are plans going ahead which will provide for exchange, commissary, medical and dental facilities. In many other areas, such as housing and recreational facilities, Navy families can look forward to living largely on the local economy, sharing the customs and traditions of their neighbors and living the local life to the fullest, as do our Navy families living in Japan, Scotland, Spain, Italy and so many other interesting places around the world.

MANY OF THE OFFICERS AND MEN who have taken part in one of Admiral Zumwalt's Retention Study Groups have expressed a strong desire to have the opportunity to be stationed overseas with their families. While the major gain in the forward deployment of these ships will be in readiness and a saving in transit times to and from deployed stations, the expressed desires of Navymen for billets overseas have also been factors. The new schedules will also provide CONUS-based ships with additional time in their home ports. It is in keeping with the moving spirit of the U. S. Navy that many of our officers, enlisted men and their families are interested in serving in these ships and living in the various overseas home ports that are available. There are 37 ships now homeported overseas in locations from Yokosuka to the Mediterranean. We are looking for men who want to serve in these ships and live overseas with their families while performing a normal tour of duty with a fleet unit. Navy men with good records are encouraged to volunteer for assignment to these ships and units homeported overseas.

David H. Bagley

ever, if you're in one of the ratings to be phased in at a later date but think you're qualified for it now, you should contact your detailer. For more information, see your career counselor about BuPersNote 1133 (20 Jun 72).

• RECRUITING COMMAND SETS ENLISTMENT GOAL AT 130,000

The Navy Recruiting Command recently announced its enlistment goal for fiscal year 1973 -- 130,000 new Navy people, representing an increase of nearly 50 per cent over the goal for FY 72. Recruiting Command has been preparing itself for the challenge this represents: in the past few months, new enlistment programs offering three-year active duty obligations, choice of coast options, and improved school guarantees have been offered to new enlistees. A paid print advertising campaign has been started in 26 major magazines and, more recently, a program of "Go-Navy" cruises was initiated to offer prospective enlistees an opportunity to see the Navy in action. Recruiting Command officials say they intend to increase the "Go-Navy" cruise program and to provide sales motivation training for recruiters.

• A GROWING TREND: MINORITY ENROLLMENT AT NAVAL ACADEMY

The new class of midshipmen recently sworn in at the Naval Academy includes a greater minority group representation than any previous class at Annapolis. Of the new plebes, 92 are from minority groups. With the return of other Academy midshipmen this fall, the total minority enrollment will rise to 175 men--a new high.

• NAVAL AVIATION SETS BEST SAFETY RECORD IN HISTORY

Naval aviation posted its best safety record in history during the last fiscal year, continuing a trend toward progressively better safety records over the past 20 years. Preliminary figures for FY 72 show that Navy fliers had an accident rate of .89 accidents per 10,000 flight hours, marking the first time the accident rate has dropped below 1.00 per 10,000 flight hours in the history of naval aviation. The accident rate for most types of Navy aircraft dropped during the year in which Navy fliers logged about three million flight hours.

• Z-GRAM 114: ECOLOGY "SPOTREPS" FOR ENVIRONMENTAL PROTECTION

Citing the great importance of environmental protection to the entire world, Chief of Naval Operations Admiral Elmo R. Zumwalt, Jr., launched in Z-gram 114 (6 Jul 72) a test program of ecology "SpotReps" (Spot Reports) designed to bolster the Navy's continuing efforts towards environmental protection and improvement. These SpotReps, covering environmental hazards found at sea by Navy ships and aircraft, are designed to provide information on environmental problems such as oil spills, air pollution, accumulation of debris and fish kills; these reports include observations in all areas on, above and under the seas. With operations ashore, at sea and in the air, the Navy has been a leader in national efforts to preserve our environment for future generations, and its $1.5 billion program for the next five years is designed to contend with known environmental hazards. The personal involvement

of each individual in the Navy is the key to maximum effectiveness in these programs, however, and ADM Zumwalt said, "You, who with your fellow men will be the ultimate beneficiaries, can be valuable assistants as we work together to resolve one of the most serious problems facing the human race."

• FIRST NON-PILOTS BECOME COs OF FIGHTER SQUADRONS

Commanders Gayle Elie and Fred Staudenmayer, both of whom are F-4 Radar Intercept Officers, recently assumed command of Fighter Squadrons 21 and 33, respectively, becoming the first two non-pilots to command Navy fighter squadrons. Until two years ago, the law required that pilots be assigned as squadron commanders; since the law was changed, non-pilots (NFOs) have been given command of two attack squadrons, and BuPers officials have indicated that others will be given squadron commands in the future. VF-33, which has won the battle efficiency "E" for the past three award years, has also been involved in a recent early command program under which CO and XO billets are filled by officers junior to those normally assigned.

• RESTRICTIONS EASED ON WOMEN'S DEPENDENTS' ALLOWANCES

Due to a recent ruling by the Comptroller General, civilian husbands of Navy women may now be considered to be dependent if it can be shown that the husband is financially dependent for more than one-half of his support. This means that Navy women in this situation may now be able to draw allowances such as BAQ at the "with-dependents" rate. Previously, it was required that a husband be physically or mentally incapable of self-support to be considered a dependent for allowance purposes. This change, which is effective as of 3 Jul 72, represents a step toward the ultimate Navy compensation goal of "equal pay for equal work."

• TIME IN SERVICE REQUIREMENTS INCREASED FOR OFFICER PROMOTIONS

Total commissioned time in service requirements for officer promotions will be increased slightly under the FY 73 promotion plan recently approved by Secretary of the Navy John W. Warner. Because of declining strength, reduced requirements, and cost increases, the number of vacancies in the officer grade structure has decreased--which means longer waits for promotion. Total commissioned time in service requirements for promotion to each rank under the FY 73 plan are: 18 months for LTJG; 3 1/2 years for LT; 8-9 years for LCDR; 15 years for CDR; and 20-21 years for CAPT.

• SECNAV ENVIRONMENTAL PROTECTION AWARD WINNERS ANNOUNCED

Winners of the first Secretary of the Navy Environmental Protection Awards were announced in a recent AlNav as follows: USS Bainbridge (DLGN 25); Naval Base, Pearl Harbor; Naval Air Station, Pensacola; Naval Ship Research and Development Center, Annapolis; Naval Undersea Center, San Diego; and Marine Corps Base, Camp Pendleton.

Other finalists in the awards competition included: USS Davis (DD 937); USS Santa Barbara (AE 28); USS Cripola (AO 63); Naval Submarine Base, New London; Naval Air Station, Cecil Field; Naval Station, Key West; Naval Air

Rework Facility, Pensacola; Naval Base, Great Lakes; Naval Base, Newport; Public Works Center, San Diego; Naval Communications Station, San Francisco; Naval Ship Engineering Center, Philadelphia; Fleet Training Center, San Diego; Naval Supply Center, Puget Sound; Naval Civil Engineering Laboratory, Port Hueneme; The Naval Research Laboratory; Marine Corps Base, Camp Lejeune; Marine Corps Recruit Depot, San Diego; and Marine Corps Air Station, Kaneohe.

• WINNERS ANNOUNCED FOR 1971 ASHORE SAFETY AWARDS PROGRAM

The Secretary of the Navy recently announced and congratulated the 1971 winners in the Annual Department of the Navy Ashore Safety Awards Program. Naval Electronics Laboratory Center, San Diego, won the Activity Award competition; Naval Air Station, Lakehurst, was runner-up. Winner of the Major Command Award was Naval Air Systems Command, followed by the Bureau of Medicine and Surgery. In commending the winners and other nominees for these awards, SecNav John W. Warner cited the need for "command attention to all areas of the Navy's accident prevention and health programs so that needless waste and suffering can be eliminated."

• USS WADDELL RECEIVES MARJORIE STERRETT FUND AWARD

USS Waddell (DDG 24), which recently returned to San Diego from her WestPac deployment, has been selected to receive the Marjorie Sterrett Battleship Fund Award for FY 72. This nomination capped a year in which Waddell earned her fifth consecutive Battle Efficiency Award (the Battle "E"), thereby joining an exclusive club of Gold "E" holders. Waddell was also the recipient of the CinCPacFlt Golden Anchor Career Motivation Award for 1971, and was selected to represent the U. S. Navy at the 1972 Imperial Ethiopian Navy Days at Massawa, Ethiopia.

• GETTING OUT SOON? DON'T FORGET REEMPLOYMENT RIGHTS

If you're due to be separated from the Navy soon, an important part of your separation processing is completion of a Department of Labor Form OVRR-2 to guarantee your reemployment rights--regardless of whether or not you had a civilian job when you entered the Navy. The primary purpose of this form is to ensure that all available assistance can be provided to you concerning job counseling and employment opportunities. Be sure you protect your rights by filling out Form OVRR-2 when you're checking out.

• DOD DRUG TESTING PROGRAM NOW UNDERWAY

The Department of Defense Tri-Service Random Urinalysis Drug Testing Program is now underway at military installations and activities throughout the world. Under this program, all members of the armed forces are subject to random, periodic testing to detect possible drug abuse. In addition, a new tri-service arrangement has been started under which the Navy, Army, and Air Force are each responsible for handling urinalysis testing for all services within their designated geographical areas throughout the world. Since the program began on 1 July, about one-third of all active duty Navy

people have been exposed to the drug abuse education program.

In a related development, it was recently decided that mandatory drug testing will no longer be required for military people over 28 years old. Although commanders still have the option of including individuals from the older age groups in random testing for drug abuse, it was decided--on the basis of past testing which indicated an extremely low incidence of drug abuse among older servicemen--that these tests could be put to better use in the highest risk areas.

• 1972 NEY AWARDS: EXCELLENCE IN FOOD SERVICE

If you joined the Navy for the good food--rather than, or in addition to seeing the world--your best chances, at least during the past 12 months were USS LaSalle (LPD 3), USS Frederick (LST 1184), Naval Station Guam, or Fleet Activities Sasebo, Japan--winners in their respective categories of the 1972 Ney Memorial Award for outstanding general messes. Runners-up in the competition, which were recently announced, were as follows: Large Mess Afloat--USS Sperry (AS 12), USS Kitty Hawk (CVA 63); Small Mess Afloat--USS Waccamaw (AO 109), USS Blakely (DE 1072); Large Mess Ashore--NTC San Diego, NavCommSta Philippines; Small Mess Ashore--Puget Sound Naval Shipyard, NavCommSta Puerto Rico.

• SIGNATURE AUTHORITY EXTENDED TO CPOs

Commanding officers may now delegate "by direction" signature authority to chief petty officers (E-7) in the same instances as it has been authorized for master and senior chiefs in the past. This decision resulted from recent discussions and observations which determined that extension of this authority to CPOs (E-7) would further enhance their position.

• HUMAN RESOURCE DEVELOPMENT CENTERS OPENED

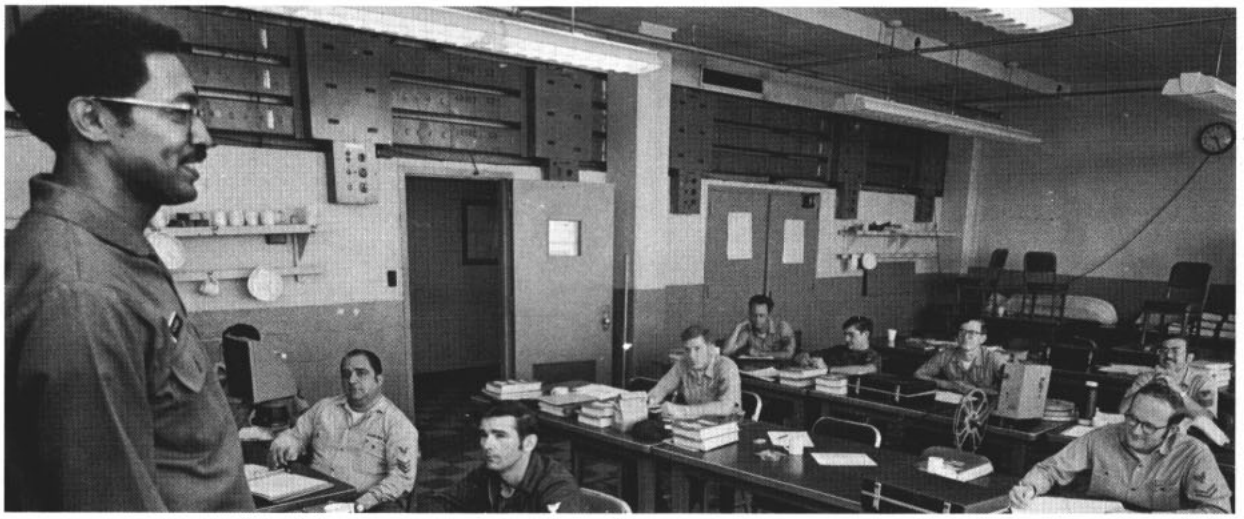
The Navy has established two Human Resource Development Centers--one at Newport, R.I., the other at San Diego, Calif.--to assist in devising means to make improvements in the areas of drug and alcohol abuse control, race relations, intercultural relations and human resource management. In a related development, volunteers will soon be manning 27 local drug care centers which are being set up, as part of the Navy's counseling and rehabilitation effort, at several CONUS and overseas locations.

• ALL-NAVY CARTOON CONTEST: DEADLINE 1 NOVEMBER

Unless you're the type of person who works best under last-minute pressure and one who can scratch out a top-notch cartoon in a few minutes, you'd better start thinking about--and drawing for--the All-Navy Cartoon Contest. Entries must be submitted to the Chief of Naval Personnel by 1 November. All Navy people on active duty for more than 90 days, and also their dependents, are eligible. For the first time this year's contest includes a dependents' category with adult and junior divisions. Prizes for the winners will include three original cartoon strips and three wrist watches specially designed by Hank Ketcham famous creator of the "Half Hitch" and "Dennis the Menace" cartoon strips.

Personalities in the Fleet

Avionics Instructor



"I APPROACH IT from this angle. In a plane, I want to have the best technicians . . . my life may depend on them."

Aviation Electronics Technician 1st Class Franklyn L. Richardson is a Navy Instructor. His background, ideas, and the problems he encounters, are similar to those of other instructors at the Naval Air Technical Training Center in Memphis, Tenn.

However, as an instructor who happens to be a Black American, Richardson is in a position to make some observations about Navy training in areas that might be overlooked by some of his counterparts.

Asked whether he had felt the effects of any discrimination, he said, "There is an issue along this line; discrimination does exist. However, there has been no major problem here. It is possible that personal bias may have caused some students to ask fewer questions but there's never been anything apparent on the race question.

"Regardless of my feelings toward individuals, I want my students to be the best qualified in their rates. Any one of them might end up working on a plane I fly in. Therefore, I'm going to make sure he's got the best training he can possibly get.

"I think we are in need of more black instructors. It's a good thing," he said. "I believe it's good that any race problems should be solved in a training situation, rather than for the first time in serious situations.

"I DID NOT REQUEST INSTRUCTOR DUTY. When I got orders to Memphis, I began right off learning about myself and about other people. I overcame my fear of getting up in front of people. It's been a real challenge but now I'm more capable of understanding where I stand.

"It's wonderful duty; all the other instructors and myself know what the problems are in the teaching-learning field. I believe we instill and develop in our students the knowledge and ability to handle problems. We develop the people to do the job."

Richardson enlisted in 1944 as a steward's mate in the Coast Guard—it was then part of the Navy. During WWII he served aboard the troop transport USS *Admiral W. L. Capps*. He left the service at the end of the war to try his hand at various civilian trades, working in a furniture factory and, later, as a TV repairman.

In the spring of 1959, he decided to join the Navy. "I got in a rut and it was a good change."

Enlisting as an airman, he was assigned to the avionics shop aboard the carrier USS *Yorktown*. Now he instructs in the Advanced First Term Avionics Program at Memphis.

His students obligate themselves for six years in order to receive the advanced training. They are also guaranteed promotion to petty officer 3rd class on the successful completion of the first phase of their training. On completing the training, the student is assigned to a Class "C" School where he is taught the basic information to maintain and operate electronic equipment in a specific type of aircraft. With this training and experience behind him, he joins the fleet technically qualified and prepared to maintain the aircraft in his new unit.

Personalities in the Fleet

Joining...the Hard Way

THE OFFICER CANDIDATE SCHOOL in Newport, R. I., sends several thousand newly commissioned officers to the Fleet every year. Usually they are new to the world of ships and the sea, but recently the destroyer tender USS *Yosemite* (AD 19) had a special interest in one of the new ensigns out of Newport.

A year ago, Jonathan Levi had been rescued at sea by the Mayport-based *Yosemite*. In an unusual ceremony, Levi had enlisted in the Navy while on board the ship that rescued him.

This unusual route to a commission began when Levi graduated with a degree in physics from Kalamazoo College in Michigan in June 1970. On the third of July, that year, he and two friends set sail from Detroit on a 41-foot yawl named *Yankee*, with plans for a two-year cruise around the world.

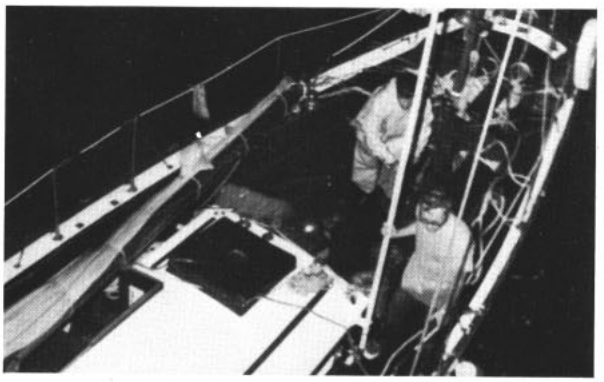
AFTER COMPLETING a successful first leg to Bermuda, they were headed to Florida when heavy winds snapped the masts, leaving them with only a small engine and little fuel. "I was on watch at the time," remembers Levi. "It was late at night when suddenly the boom fell to the deck."

Yankee's visual distress signal was spotted 345 miles east of Daytona Beach, Fla., by Seaman Apprentice Theodore Bethell, a *Yosemite* lookout. The 530-foot destroyer tender was making her way south for refresher training at Guantanamo Bay, Cuba, at the time. Chief Warrant Officer Gene Worell, the OOD, closed the stricken yacht to investigate. Levi brought his crippled craft alongside *Yosemite* despite heavy winds which made close maneuvering difficult.

Initial efforts were concentrated on passing gasoline and supplies to *Yankee* so that she would be able to continue under her own power to the nearest land. But while the tender's crew lowered the cans to the yachtsmen, the wooden hulled craft suddenly developed severe leaks and threatened to sink. During one approach, her engine failed; the decision was made to abandon her.

But getting aboard *Yosemite* proved to be difficult —normally a rope ladder would have been lowered from the tender's stern while the small craft was towed astern so that the castaways could leave *Yankee* from the bow. But climbing directly over the yacht would have meant risking being injured by the jagged remains of the mast as the yawl bobbed wildly in *Yosemite's* wake.

A line was passed to *Yankee* from the fantail and the smaller craft dropped well astern. The rope ladder was lowered and one by one the three men aboard tied lines around themselves, jumped overboard and swam to the ladder.



After they had climbed aboard, it was realized that the yacht's hull would not be able to withstand the tender's speeds as she headed for Cuba. So *Yankee* was left adrift in the hope that arrangements could be made to have her picked up by a salvage company. She was never recovered, however.

YOSEMITE CONTINUED toward Guantanamo Bay with her three unexpected guests aboard. For several days Levi and his comrades received a thorough orientation in Navy life at sea and observed a number of shipboard drills as the ship prepared for fleet training.

"We had free run of the ship from the moment we were rescued," said Levi. "Very few people get a closeup look at the Navy and how it works from the inside before signing up."

What he saw impressed him.

After several days aboard, Levi asked Captain Jean Fitzgerald, commanding officer of *Yosemite*, if he could enlist. The captain sent a radio message to the Chief of Naval Personnel requesting special permission to enlist the new recruit on board.

"Something about this situation appeals to the imagination, CAPT Fitzgerald said. "Yachtsman on round-the-world cruise is rescued by Navy ship and enjoys company of seafaring men so much that in two days he wants to join up. Request authorization to effect enlistment on board."

"Permission granted," came the reply. Paperwork and medical exams were completed on board and, on Navy Day—27 October—Levi was sworn into the Navy.

From Guantanamo Bay, he returned to his home in Inglewood, Calif., where he received orders to report to boot camp at San Diego. His two friends from *Yankee* returned to school. Levi distinguished himself during basic training, earning the positions of Recruit CPO and class Honor Man and he also received the American Spirit Honor Medal.

From San Diego he reported to Fire Control Technician "A" School in Vallejo, Calif., where he graduated first in his class.

LEVI'S FIRST DUTY STATION was on board the gasoline tanker USS *Elkhorn* (AOG 7) at Pearl Harbor. As a fire control technician seaman, he served in her for only two months before receiving transfer orders to report to Officer Candidate School.

Levi was company commander of Lima Company at Naval OCS, another credit in his already impressive Navy record. His first assignment as an officer was to USS *Sutherland* (DD 743), a destroyer on the West Coast, after first attending Surface Warfare Officer School in Newport.

"My experience with the Navy has been unusual, I guess," Levi said, "but I think I'll be a better officer for it. At least I had some time as an enlisted man and should understand some of the problems there. And I've been enjoying every minute of it—maybe my initial around-the-world trip will be completed in the Navy."

—By LTJG Toby Webb

First Woman Helicopter Plane Captain

MISS ROSEANN ROBERTS, 28, of Albuquerque, N. M., became the Navy's first woman helicopter plane captain when she received her graduation certificate from Rear Admiral Narvin O. Wittmann, force material officer for Commander Naval Air Force Pacific, in a recent ceremony at NAS Imperial Beach, Calif.

Minutes before the ceremony, performing her first official plane captain duty, Roseann surprised the Admiral by directing his arriving helo to its assigned parking place. She is currently serving with Helicopter Support Squadron Three (HC-3) and was the first woman assigned to the squadron.

While ADM Wittmann and Roseann cut the cake bearing the inscription, "First Navy Helicopter Woman," the admiral remarked that he was proud to participate in this Navy "first."

"It's just great," said Roseann. "I've always wanted to work in aviation and for me this is a dream come true."

The slim, brown-haired woman said she first became interested in aviation while stationed at Naval Air Station, Whiting Field, Fla., in 1963. "Although I was a seaman at the time, teaching Morse code, I was working around aviation," said Roseann. "I guess that is where I first began to like it."

ROSEANN FIRST ENTERED THE NAVY in 1962 and, after recruit training at Bainbridge, Md., she received orders to NAS Whiting Field, Fla. Completing a two-year tour there, she was ordered to the Naval Training Center, Great Lakes, Ill., to attend a 36-week course in electronics. On completion of school, Roseann was sent to Washington, D. C., where she worked in an electronics shop until the end of her enlistment in 1965.

"Because of my background in electronics and the high availability of jobs in the aerospace field, I decided to give it a try on the outside," said Roseann. During the next seven years she worked for aerospace electronics firms in Fairfax and Norfolk, Va., Denver, Colo., and Albuquerque, N. M.

"With the big cutback in the aerospace industry I began to think seriously about reenlisting in the Navy,"

Roseann said. "I felt sure I could stay in the electronics field and hoped I could get into aviation electronics."

Roseann was accepted for reenlistment last February and was ordered to the Naval Receiving Station, San Diego, to await further orders. "I was quite happy to receive orders to a squadron," said Roseann. "I had to come back into the Navy as a seaman and did not think I could get into aviation."

Roseann reported to HC-3 in March and discovered she was the only woman.

"I really was pleased to welcome her aboard," said Commander William S. Butler, commanding officer of HC-3. "However, I was a bit shocked when she requested to work in aviation electronics."

After Roseann reported, HC-3 received four more enlisted women. "Unlike Roseann, however, they all are striking for yeoman or personnelman (administrative ratings)," said Butler.

SHORTLY AFTER REPORTING to the squadron, Roseann changed her rate from Seaman to Airman. "Although her background in electronics qualified her to go to work immediately in the electronics shop," Chief Petty Officer Stewart R. Homewood said, "it is a squadron policy that all shop workers first become qualified plane captains."

This entails successfully completing a three-month plane captain course which Roseann completed in slightly more than two months. "The course is quite extensive," said the chief. "Roseann now has a thorough knowledge of all the major systems on the CH-46 helicopter."

In addition to being able to run preventive maintenance checks on all systems, she has learned to refuel the aircraft, wash it, and check for any structural damage. She also has learned the proper use of hand signals used to relay instructions to the pilots, such as start engines and rotors, shut them down, and the correct signals to taxi the aircraft.

I WOULD LIKE TO HAVE A DOZEN MORE like her," said Chief Homewood. "She is always willing to do more than her share; she cheerfully accepts every assignment." Homewood, a veteran of more than 20 years' naval service, said Roseann is the first enlisted woman who had ever worked for him. "At first the men in the shop had some difficulty adjusting to the presence of a woman," said the chief. "They couldn't use some of the more colorful naval terminology they had been using. But," he continued, "the men soon learned to respect Roseann's ability and now treat her as an equal."

"Although I have been attending classes every day, learning all about the CH-46, I have never even flown on one," said Roseann. "My first flight will be next week; I'm really looking forward to it."

Roseann hopes the squadron will let her qualify as a crewmember on the *Sea Knight* helicopter. "But that's in the future," she said. "Right now I'm happy doing what I like best—working in aviation electronics."

—PHCS V. O. McColley

seabees + bread truck = red cross Emergency First Aid Vehicle

WITH THEIR TRADITIONAL "Can Do" spirit, seven members of CBU-402 at NAS Pensacola, Fla., turned a bread truck into a self-contained mobile canteen and emergency first aid vehicle for the local chapter of the American Red Cross.

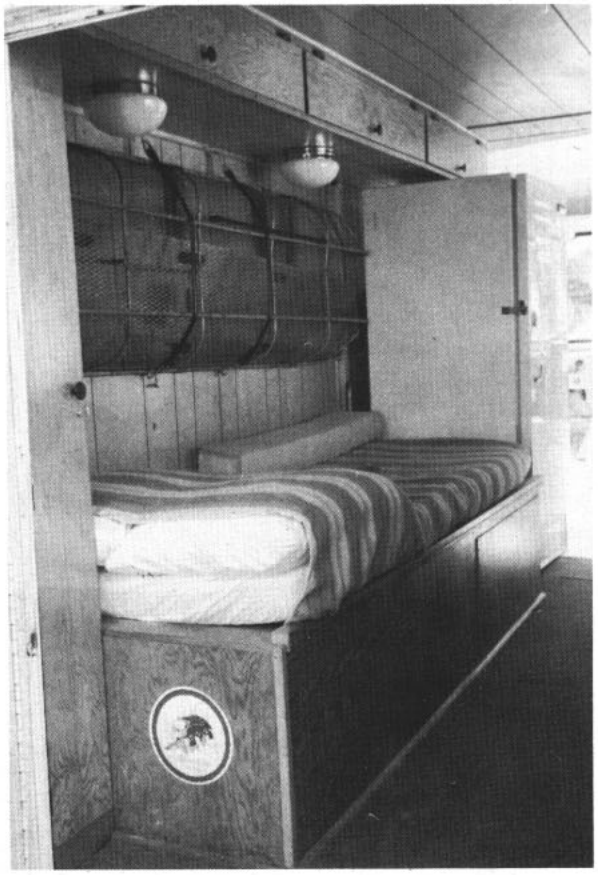
During disaster operations last year after a tornado struck a nearby community, the Red Cross found that a special vehicle was needed to provide services and flexibility in assisting victims. The unit would have to be mobile, completely self-contained, and capable of providing emergency first aid and canteen facilities.

The bread truck, donated by Pensacola firm, was repainted and put in first-class mechanical shape. Then the Seabees were called to convert the interior of the old bread truck into just what the Red Cross ordered. They installed a bunk, cabinets, and a galley in the vehicle, which also contains a refrigerator, stove and internal electrical system.

Now the truck is able to operate independent of an outside power source and—if used in the field—it can remain on the scene of a disaster or move about for as long as necessary. The unit has already been used at civic gatherings where large crowds were present, and the Red Cross is often asked to augment Navy mobile facilities at open houses and air shows in the Pensacola area.

Those responsible for the bread truck's conversion —and the availability of more immediate emergency health care in the Pensacola area—were BU2 G. L. Ail, CE2 H. S. Greenman, UT2 L. J. Armstrong, UT3 R. L. Steele, EA2 W. M. Wilson, AT3 Mark Shaffer, and D. R. Jones.

—Story by JOC P. E. Rothgeb
—Photos by PH1 H. R. Curry



Holder to the rescue

ADRIFT at SEA

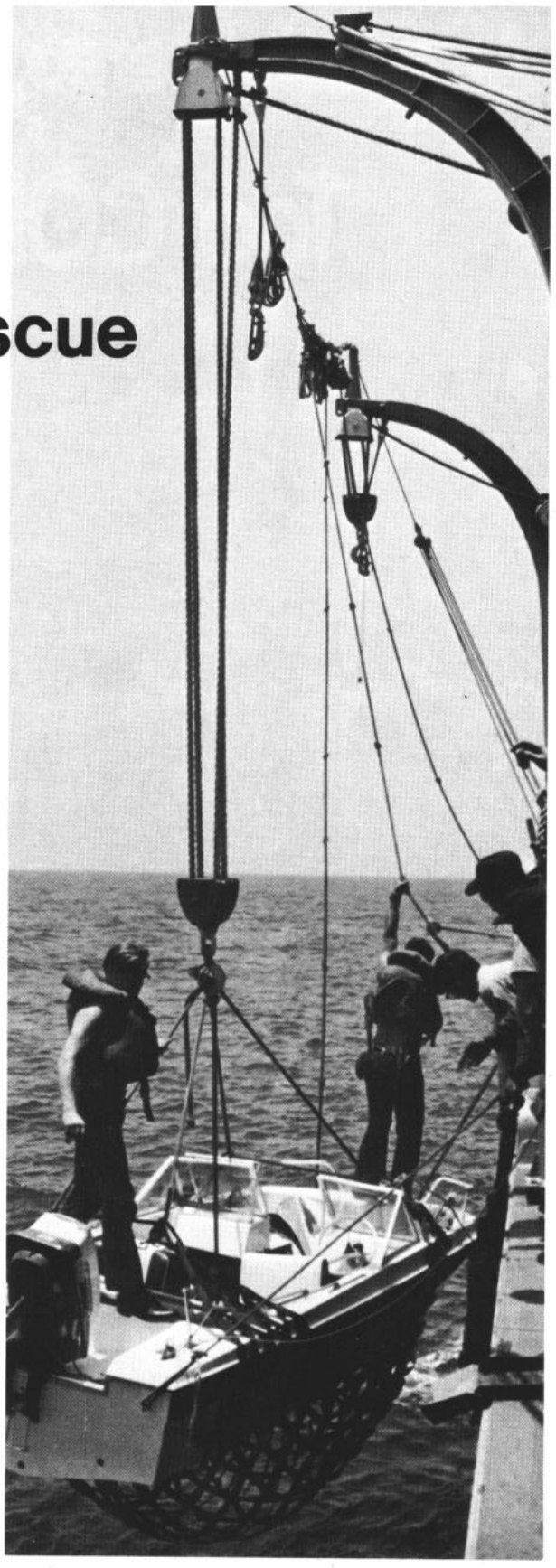
A FISHING TRIP might have ended in tragedy for two brothers from Miami had it not been for the efforts of the Coast Guard and the destroyer USS *Holder*. Richard and Dennis Serafini left Port Everglades, Fla., recently on what they expected to be a three-hour fishing trip. After trolling for two hours they decided to return to Port Everglades, but found their boat's outboard engine had burned out. Since they were without a radio, they drifted without food or water throughout the remainder of the day and all the following night. In the darkness, their situation became even more perilous. The air was very cold and the water became so rough, the fishermen had difficulty keeping their small boat from capsizing.

The next day, they sighted two Coast Guard helicopters. Using a ski mirror to reflect the sun, they attracted the attention of one of the choppers after both had passed nearby without sighting the stranded pair. The helicopter hovered over the small craft and lowered three cartons of milk and a radio signal beacon, then left. Almost two hours after they were sighted by the helicopter, the two spotted USS *Holder* which took them and their boat on board.

The Serafinis were given a chicken dinner, some clean clothing and a place to rest during the four-hour trip to Port Everglades. In the meantime, the Lakeworth, Fla., Coast Guard Station was notified of the rescue and *Holder's* chief radioman, William Rummel, established communications with the Miami marine operator so both men could talk directly with their families.

When they arrived at Port Everglades, members of the Serafini family were on hand to greet the two overdue fishermen. *Holder's* captain presented the two brothers with a *Holder* plaque and picture, together with a chart showing where they had been found.

—Photos by PH2 T. R. Hearsum



Antarctic Cargo Handlers

"Too COLD to Handle"

OPERATION DEEP FREEZE Navymen at McMurdo Station, Antarctica, completed unloading 14,000 tons of cargo in late February. The cargo—taken from the Military Sealift Command cargo ships USNS *Private John R. Towle* and USNS *Wyandot*—will be on hand for use by Operation *Deep Freeze* personnel at the start of the next summer support season, to begin in October.

It is during the final weeks of the summer season that the ships reach the Antarctic, when ice in the sea lanes approaching the continent is made passable by Coast Guard icebreakers. Once the supply ships reach Winter Quarters Bay at McMurdo—only 840 miles from the South Pole—the cargo handlers go to work.

The cargo handlers are members of the Navy Cargo Handling and Port Group, Detachment Echo, from Cheatham Annex, near Williamsburg, Va. They travel the world to unload Navy cargo at isolated bases from either Navy, Military Sealift Command or Merchant Marine ships.

A total of 52 men were involved. They were directed at McMurdo by Lieutenant (jg) Richard L. McLean and Chief Boatswain's Mate Albert H. DeChristopher. The group works long hours and is constantly subjected to hazards created by shipboard rigging and swinging cargo booms. The heavy loads are hoisted from decks and holds of ships onto either piers, lighters or small craft.

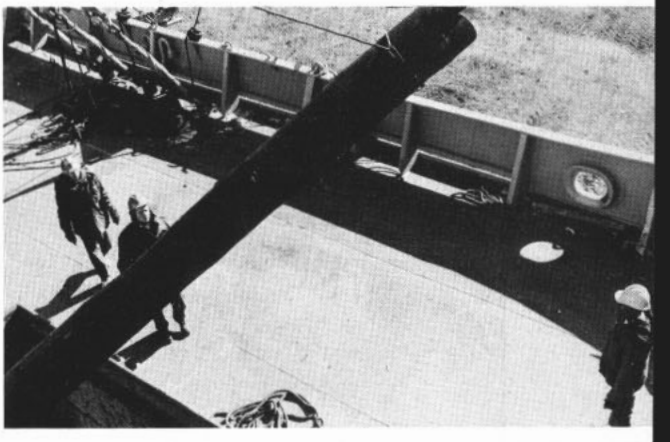
The cargo unloaded from *Towle* and *Wyandot* consisted of foodstuffs, consumable material such as propane gas in cylinders, vehicles, heavy equipment and building supplies. Some of the material will be used at McMurdo Station. The remainder will be airlifted by planes of VXE-6 next season to the U. S. inland stations.

CARGO HANDLERS are split into four 10-man teams, each with a hatch captain, hold boss, winchman, equipment operator, signalman and five stevedores. They work around the clock. Communications between hatch captain, winchman and hold boss is the job of the signalman, positioned so that he can observe all phases of the operation.

In the holds the equipment operator and stevedores push, shove and pry in the loading of pallets, using special cargo slings and nets that are hoisted over the

• Left: Annual inventory of stockpiled supplies that will be distributed to the various departments at McMurdo Station during the forthcoming wintering-over period.

• Below: A shipment of telephone poles to replace those at several U. S. bases on the continent which are damaged or worn will help strengthen the vast communication network.



ship's side. Cargo booms up to 30-ton capacity are guided up and down, left and right, at the desire of the winchman. Pulling cargo out of corners of the hold —which is usually out of sight of the winch operator— demands a unique communications system between the men in the hold, the hatch captain and the winchman. This is one of the most challenging aspects of the winchman's job, and also one of the most dangerous. The extra strain on wire and rigging is one thing; stubborn cargo is something else.

OCCASIONAL SNOW FLURRIES hamper the men but the snow and chilly weather don't cool the men's enthusiasm. Despite the long hours of work and the weather, the cargo handlers usually get the job done in a short period of time.

"It's a lot of hard work," DeChristopher said, "and generally under very trying conditions. Safety is the primary concern of the cargo handlers."

The chief is on his fourth deployment to the Antarctic. He said, "We've had few injuries in the years I've been with the outfit."

When a man reports to the cargo group, he receives special indoctrination on the operation and responsibilities of the command. Beginners are given basic cargo handling courses and when they're completed, the men are assigned to teams to begin working towards being a hold boss or a hatch captain.

The order of loading cargo aboard a ship is important and the rule is that the last item aboard is the first to be taken off—such as mail. Errors crop up, though. An error in measuring or weighing a crate or vehicle can result in lost manhours, especially when a particular piece won't fit in an assigned spot. Entire hold decks have to be reshuffled or heavier lifting gear has to be brought to the scene.

"Handling cargo isn't easy," said DeChristopher, "but it's a demanding and interesting aspect of today's Navy—at least from the logistics angle."

—Photos by JOC C. R. Elliott

• Above: USCGC Staten Island at Winter Quarters Bay. The Coast Guard ships cut through the ice, making the sea lanes passable.

•. Below: A special detail is assigned to handle the cargo after it is offloaded from the ships.

•. Right: Taking inventory of the foodstuffs to be used by the wintering-over party.

IF YOU'RE BUYING A CAR OVERSEAS, CHECK THESE NEW REQUIREMENTS

ANY 1968 or later model privately owned vehicle that Navymen overseas buy and bring back to the United States must meet emission standards of the Clean Air Act (P. L. 9L-6043). The only exceptions are for:

- Cars of 1967 model or earlier years.
- Passenger cars with diesel engines.
- Motorcycles.
- Racing cars which won't be operated on public streets or highways.

Vehicles purchased overseas and shipped to the United States must be accompanied by a declaration which lists 11 categories. One must be checked by the owner to indicate the circumstances under which his vehicle is being imported. Three of the categories assume the vehicle might not conform to federal emission standards when imported or that the capability of the vehicle to meet emission standards has not been determined. In such cases, provision has been made for the owner to post a bond until the emission standards are met or until the law is otherwise satisfied.

Any 1968 or later model vehicle, whether new or used, for sale or resale or for personal use, and brought back to the United States, must comply with both the Federal Emission Standards of the Clean Air Act (P. L. 91-604) and the Federal Motor Vehicle Safety Standards of the National Traffic and Motor Vehicle Safety Act of 1966. The best evidence of conformance is the original manufacturer's certification label permanently affixed to the vehicle. If this label or tag is missing, the importer must file a declaration attesting that the vehicle is in conformance; will be brought into conformance within 90 days; or is excepted from conformance.

Vehicles not conforming may be admitted into the United States providing a bond is posted in the amount of the value of the car plus estimated duties. The conditions of the bond require that the vehicle must be brought into conformity within 90 days after importation. If the vehicle is not brought into conformance, Customs will request return of the vehicle. If the vehicle is not returned to Customs custody within five days of notification, liquidated damages will be assessed in the amount of the bond.

As a word of caution, modification of a nonconforming vehicle to meet either emission standards or the safety standards is usually very costly and time-consuming and, in many cases, virtually impossible. Importers of nonconforming vehicles should determine from the dealers or manufacturers what modifications are necessary. The best assurance of being able to import a motor vehicle without difficulty is to obtain one built for the U. S. market and bearing the certification labels of the original manufacturer.

For complete details on the motor vehicle safety standards, write: U. S. Department of Transportation, Office of Standards Enforcement, National Highway Traffic Safety Administration, Washington, D. C. 20590. For complete details on emission standards, write: Environmental Protection Agency, Mobile Source Enforcement Division, 2565 Plymouth Road, Ann Arbor, Mich. 48105.

New Customs Bureau Booklet Tells How To Import Foreign Cars Into United States

TRAVELING AMERICANS—tourists, military personnel, government employees, and others—often find it convenient to bring foreign-made automobiles back from overseas trips.

For these travelers the U. S. Treasury Department's Bureau of Customs has available a revised edition of its very handy pamphlet on how to import a car. The new nine-page leaflet answers basic questions on how to get a foreign car into the United States.

It tells you that on 1 Jan 72 the rate of duty on passenger cars dropped from 3½% to 3%. That there is no excise tax on passenger automobiles or trucks weighing less than 10,000 pounds. And that an individual's customs exemption may be applied toward the value of a car when the vehicle accompanies the owner on the same carrier.

Other valuable information covers Federal Safety and Emission Standards; vehicle registration and driver permit requirements, and how the value of the car is determined for Customs purposes.

Copies of the leaflet, entitled "Importing a Car," are available at all Customs offices or by writing to the U. S. Bureau of Customs, P. O. Box 7118, Washington, D. C. 20044.

Quantity purchases can be made from the Superintendent of Documents, P. O. Box 1533, Washington, D. C. 20013. The price is 10 cents or $6.75 per 100.

Students Can Gain Academic Background Through VA's Tuition-Paid PREP Program

THE VETERANS ADMINISTRATION has begun a new educational program geared for men and women about to be discharged from active duty or for those who lack a high school diploma or need extra work in order to qualify for "A" school. Known as the Predischarge Education Program (PREP), it has been set up to provide non-credit refresher courses, counseling, and orientation for applicants who have completed at least 180 days of continuous active service.

The maximum benefit is a $175 reimbursement for tuition, fees, books and supplies awarded to those enrolled in PREP by the Veterans Administration. The program in no way diminishes veterans' or GI bill benefits for individuals after they are discharged.

The program can be administered in several different ways with a variety of subjects offered as courses. At Norfolk, for instance, the program is being carried out in conjunction with Old Dominion University. Special eight-week classes meeting every afternoon have been set up, and the subjects offered are English, reading, mathematics, orientation and counseling, along with guided independent study.

These courses do not carry any college credit. Rather, they are designed to help the beginning student establish proper study habits and gain valuable academic background which will help him when he goes to school after his release from active duty.

PREP is being offered at an increasing number of ships and stations in the Navy. In some places the program is administered solely by the command with trained members of the unit conducting the courses. At other places, such as in Norfolk, the program is held in conjunction with a local university.

Persons interested in participating in PREP are advised to check with their Educational Services Officer for further details.

REDUCED AIR FARES FOR SERVICE FAMILIES OVERSEAS

A NEW SCHEDULE of reduced fare reservations for military personnel stationed overseas and their dependents—and another set for some of their parents —is now being offered by three commercial airlines, Pan American, TWA, and Northwest Orient. The new fares are lower than previously published R & R rates and, in many cases, are equivalent to charter flight prices.

For members and dependents, the new fares are applicable to some 10 cities in the Pacific and 26 cities in Europe, and the flights leave from a variety of points in the United States. Some of the round-trip rates included are as follows: Boston to Barcelona, Spain, $214; Jacksonville to Nice, France, $278; New York to London, $153; Washington, D. C., to Rome, $234; Los Angeles to Rome, $386; Los Angeles to Tokyo, $297; San Francisco to Hong Kong, $385; Honolulu to Bangkok, $415; Norfolk to Manila, $589.60; and New York to Tokyo, $449. The fares provide reserved seats and in some cases permit stopovers.

Active duty military personnel who wish to take advantage of these rates must be stationed overseas or assigned to a naval unit operating in an overseas area, and their travel must originate and return outside the U. S. Tickets are valid for 45 days with no minimum stay, and reservations are confirmed only when tickets are paid for. Members must have a properly executed 1580 form or a copy of official leave orders when purchasing tickets.

DEPENDENTS must have their sponsor stationed overseas or assigned to a naval unit operating in an overseas area. They may purchase a one-way ticket, which is good for one year, or round-trip tickets, which are valid for 45 days, and they must present a valid 1580 form and their military ID card or must present a statement certified by the Navy and preferably provided by the sponsor via his command, concerning their eligibility to fly. It is recommended that the sponsor provide the proper forms or declarations at the earliest time or prior to deployment. Here again, reservations are not confirmed until the tickets are purchased.

In addition to these fares, Northwest Orient and Pan American are offering reduced fares for parents of active duty service members deployed or stationed in the Western Pacific. While not as low as the dependent or member fares, they represent a considerable savings over the regular commercial fares. For instance, the round-trip New York to Tokyo fare for a parent is $684, a savings of $400.

Questions concerning these fares may be directed to the specific airlines or to the Chief of Naval Personnel (Pers-P41c).

Nuclear Surface Fleet's Expansion Calls for More Qualified Officers

A NEED FOR A LIMITED NUMBER of qualified, Fleet-experienced officers now exists in the Navy's nuclear surface program, and such officers are being urged to apply for nuclear training. The need for such officers has arisen from the expansion of the nuclear surface fleet. (See page 3, this issue.)

By the end of this year one new nuclear carrier, USS *Nimitz* (CVAN 68), and two new nuclear guided missile frigates, USS *California* (DLGN 36) and USS *South Carolina* (DLGN 37), will be manned and operating. Another carrier, USS *Dwight D. Eisenhower* (CVAN 69), and three more nuclear guided missile frigates are now under construction.

The projected needs for officers are 27 from year groups 62 through 66 and 13 officers from each year group thereafter. Applicants, in accordance with BuPers Manual article 6610300, must come from current midshipmen, NESEP candidates, and unrestricted line officers, and must have at least one year of college physics and college mathematics through integral calculus.

Only officers who receive nuclear training will be eligible for eventual assignment to executive or commanding officer posts on these new ships.

List of New Motion Pictures Currently Available to Ships and Overseas Bases

HERE IS A LIST of the movies being made available to ships and stations from the U. S. Navy Motion Picture Service. Movies in color are designated by (C) and those in wide screen by (WC).

The Hospital (C): Drama; George C. Scott, Diana Rigg.

The Gang That Couldn't Shoot Straight (C): Comedy; Jerry Orbach, Joe Van Fleet.

Clay Pigeon (C): Action drama; Telly Savalas, Ivan Dixon.

Soul Soldier (C): Western; Janee Michelle, Robert DoQui.

Straw Dogs (C): Suspense Drama; Dustin Hoffman, Susan George.

Find a Place To Die (C): Drama; Jeffrey Hunter, Pascale Petit.

The Dirty Outlaws (C): Western; Chip Corman, Rosemarie Dexter.

The Bravos (C): Western; George Peppard, Pernell Roberts.

Today We Kill, Tomorrow We Die! (C): Drama; Montgomery Ford, Bud Spencer.

And Soon The Darkness (C): Mystery Drama; Pamela Franklin, Michele Dotrice.

Danny Jones (C): Drama; Frank Finlay, Jane Carr.

Owen Marshall-Counselor At Law (C): Mystery drama; Sorrell Booke, Dana Wynter.

Minnie & Moskowitz (C): Comedy; Gena Rowlands, Seymour Cassel.

To Find a Man (C): Comedy Drama; Phyllis Newman, James Broderick.

The Horror of Frankenstein (C): Suspense drama; Ralph Bates, Kate O'Mara.

How To Steal An Airplane (C): Adventure drama; Peter Duel, Clinton Greyn.

Constellation Coins

NAVY BUFFS can still obtain a commemorative coin of the frigate *Constellation* which was built in Baltimore in 1797. The ship was returned to a permanent berth there in 1959 where she was restored, and is maintained as a memorial to the naval heritage.

The commemorative coins were struck from old copper spikes which were recovered during the process of replanking. In addition to being relics of the historic vessel, the coins also serve as lifetime passes for holders to visit *Constellation* free of charge.

Proceeds from the sale of the commemorative pieces will be used to complete the frigate's restoration. Anyone wishing to obtain a *Constellation* Commemorative Coin should send $2.00 to: *Constellation*, Baltimore, Md. 21202. Display cards with 25 coins attached are also available to ships and stations that may desire to offer them for sale.

Helicopter Antisubmarine Squadron 5 Becomes Most Decorated Outfit in Atlantic Fleet

HELICOPTER ANTISUBMARINE SQUADRON FIVE has become the most decorated HS squadron in the Atlantic Fleet.

For the second straight year, HS 5 has taken all honors available to such an organization for operational readiness and mission performance. The awards package is made up of the Arnold Jay Isbell award (the fourth time for the squadron) for antisubmarine excellence, the ComNavAirLant "E" for battle efficiency, the "A" for antisubmarine warfare readiness, and the ComNavAirLant Safety Award.

The squadron was commissioned in 1956 and has

CELEBRATING ITS SESQUI CENTENNIAL

Philadelphia Naval Station

THE PHILADELPHIA NAVAL STATION STILL serves as a location for transient personnel awaiting assignment to ships, just as it originally did in 1822. In fact, the station receives and processes some 20,000 men and women annually—making it one of the Navy's most active facilities.

Yet, unlike in 1822, the Philadelphia Naval Station performs more than 40 functions of fleet support today, including ship repair and overhaul and training for hull maintenance technicians and boiler technicians. The station receives Reservists called to active duty, men awaiting transfer, reassignment or separation, and crews of ships undergoing overhaul. It also handles precommissioning details for new construction or temporarily decommissioned ships in the yard.

The present naval station in Philadelphia began under the command of Captain William Bainbridge. The earliest ships to use the activity were privately owned vessels rented by the Navy.

The first receiving ship fitted out there was USS *Sea Gull*, which had just returned from the West Indies in 1825 and was used by the Navy until 1839. The yard's activities continued through the Civil War and the end of the 19th century, when dismantled and housed-over frigates were used as receiving ships.

The coming of the 20th century saw vast im-

since served aboard 14 aircraft carriers. Stationed at Quonset Point, R. I., it is part of the Navy's sea-based antisubmarine force. The squadron has conducted many search-and-rescue, medical-evacuation, and logistics missions.

There are now eight aircraft, 26 officers and 142 enlisted men in the squadron, under the command of Commander John A. Hickey.

Written Guarantee of School Assignment Given Recruits Delayed by Overcrowding

QUALIFIED NAVY APPLICANTS who do not obtain an assignment for an advanced school immediately after recruit training now may be guaranteed such an assignment within their first 19 months of active duty. Under the new program, applicants will sign a three-year contract and will be given a written guarantee of an assignment to a school.

When the individual does receive his school assignment he will be required to extend the obligation to four years—like the enlistments now being served by Regular Navy enlistees who receive school assignments. If the school is not available or if the individual declines the opportunity to attend, he will serve only the remainder of his three-year contract.

The new program was established to aid recruiters and detailers in handling more effectively the fluctuating number of recruits who come into the Navy each month. Summer months usually see a greater number of recruits entering the service, and school assignments for these recruits are not always available.

The program is expected to open the opportunity of advanced schooling to an additional 3600 applicants.

Review of Health Records Paves Way For Warrants Applying for LDO Rank

WARRANT OFFICERS who apply for LDO status as well as temporary and Reserve officers seeking augmentation in the Regular Navy are now being considered physically qualified for appointment simply if found qualified to perform the duties required of their rank.

Time was when administrative details delayed such appointments but now an officer's health records are examined when application for LDO or augmentation is made and the commanding officer's forwarding endorsement indicates whether or not the applicant is physically qualified based on a review of the health records.

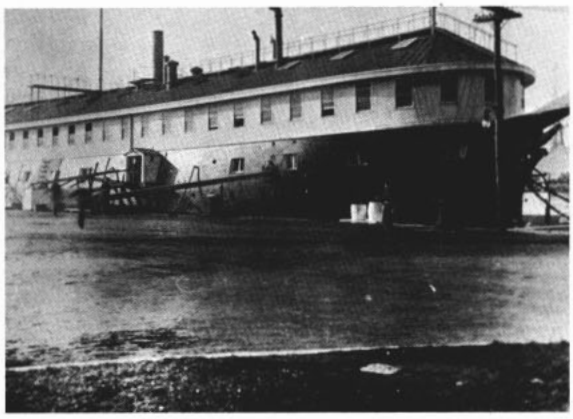
If the applicant is considered physically unfit for unrestricted duty or if he is hospitalized, on sick leave, awaiting appearance before a physical evaluation board or awaiting final action on the recommended findings of a physical evaluation or a medical board, his application, along with supporting medical information, is submitted to the Chief of Naval Personnel via the Chief of the Bureau of Medicine and Surgery for a decision.

Nine New, Small Tankers to be Added To MSC Fleet Within Next Three Years

THE MILITARY SEALIFT COMMAND, which now operates a fleet of government-owned and privately owned tankers—some of them World War II vintage—will be getting nine new 25,000-ton tankers within the next three years. The new tankers will be built with $146 million of private investments and will be chartered by the command for an initial five years with options for an additional 15 years.

According to Secretary of the Navy John Warner, the new tankers will replace some of the older tankers now used by the command. The Washington-based command has some 18 government-owned tankers and charters, and 49 privately owned tankers.

The new tankers will have a draft of 32½ feet, a maximum speed of 16 knots and a length of 587 feet.



Such ships as the frigate USS Lancaster were used as receiving ships for naval personnel at the Philadelphia Navy Yard from 1822 until a permanent facility was opened in 1917.

provements in the facilities there. Because of a cerebro-meningitis-measles-mumps epidemic aboard uss *Minneapolis* in 1903, temporary living quarters ashore were constructed. The tent homes of the sailors included a mess hall, kitchen, surgeon's office, pay office, dispensary, storeroom and prison and were replaced by temporary barracks used during World War I.

The concept of receiving ships was abandoned about this time, when in 1915 the Navy General Board recommended the abolition of ships and establishment of ashore barracks for receiving men. The recommendations came to fruition in 1917.

Now 150 years old, the Philadelphia Naval Station still stays busy serving as the first home—or the home between homes—for many sailors in the Fleet.

TAFFRAIL TALK

OFFICERS visiting the Tailhook Room of the NAS Cubi Point Officers' Club are in for a real treat—or, perhaps more appropriately, an experience—when they have the opportunity to try out "Red Horse I."

Red Horse is a "scootsonic," experimental-type "aircraft" developed exclusively for duty in WestPac. Brainchild of Captain Robert I. Myers, a former Cubi Point commanding officer, the contraption resembles a car, or possibly a type of airplane found in amusement parks. The cone-nosed vehicle, constructed from an external airplane fuel tank, is fired down a set of rails by a charge of compressed air.

A small catapult boosts the car 18 feet down the rail to an arresting gear wire. The "pilot" has the responsibility of operating a lever which lowers a hook to engage the arresting gear wire which brings the car and operator to a stop.

The whole operation is remotely comparable to a pilot making an arrested landing on the flight deck of an aircraft carrier. However, there is a difference—the carrier pilot may take off from the flattop if he misses the wire and come around for another shot—but the Red Horse pilot gets nothing but a good soaking. His vehicle plunges into a three-foot deep tank of water another 12 feet beyond the wire.

The pilot cannot drop the hook early to catch the wire. A guard has been placed in front of the arresting wire and if the hook is dropped prematurely the guard guides the hook over the wire. Therefore, timing is an essential element.

Hitting the number one wire (the only one) puts the pilot among a group of elite. A board listing all "one wirers" is in plain view for all visitors. Since Red Horse's inaugural flight, the list has grown to over 690 names. The board not only boasts the names of hundreds of naval aviators, Marines and "black shoes," but approximately 50 women have also made the list.

★ ★ ★

PETTY OFFICER 2ND CLASS JOHN W. DUNNIVANT, a student in the Advanced First Term Avionics Class at Navy Memphis, recently received an interesting letter which contained an even more interesting enclosure—a flight suit autographed by Admiral Elmo R. Zumwalt, Jr., Chief of Naval Operations. This unusual mail was sent in return for a flight suit the admiral had borrowed in the spring of 1970 when he was aboard uss *Forrestal* (CVA 59), where Dunnivant was then serving.

Admiral Zumwalt was aboard *Forrestal* during a tour of fleet units prior to becoming CNO, and Petty Officer Dunnivant was the only person in the squadron whose flight suit would fit the admiral. During CNO's recent visit to Navy Memphis, Dunnivant asked if he could have an autographed copy of a flight suit, since the borrowed one was not returned after the admiral left the ship that day on an aircraft from Dunnivant's squadron.

An autographed flight suit is what he got, in addition to an attached note from Admiral Zumwalt which read: "Enclosed with this letter is a new flight suit for you. I appreciate your reminder concerning this item, which I had borrowed from you on board uss *Forrestal*. Thank you very much for the loan of the flight suit and very best wishes for the remainder of your tour at Navy Memphis."

The All Hands Staff

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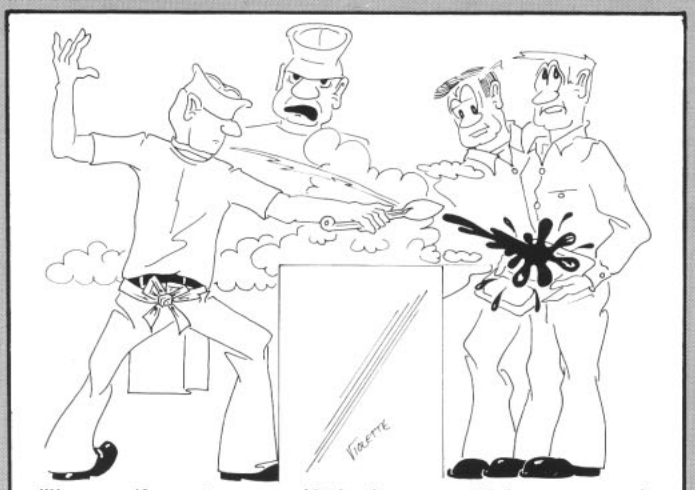
DO YOUR SHIPMATES A FAVOR - PASS THIS ISSUE ON TO NINE OTHER READERS

YNC Luther D. Oliver

"Welcome aboard; what's your date of rank?"

MT1 John E. Violette



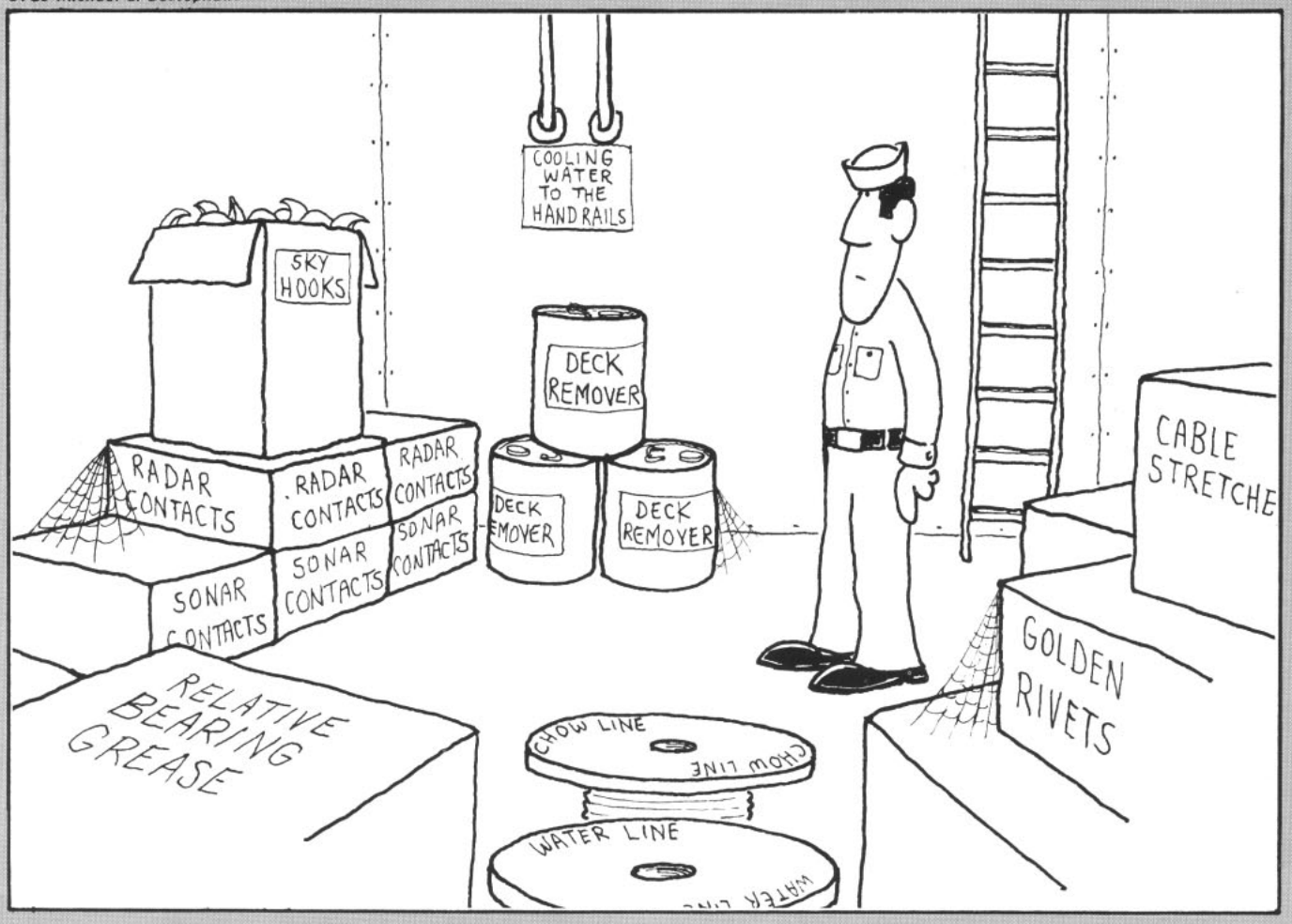
"I'm sure if you try a wee bit harder you could become a good mess cook, Jones."

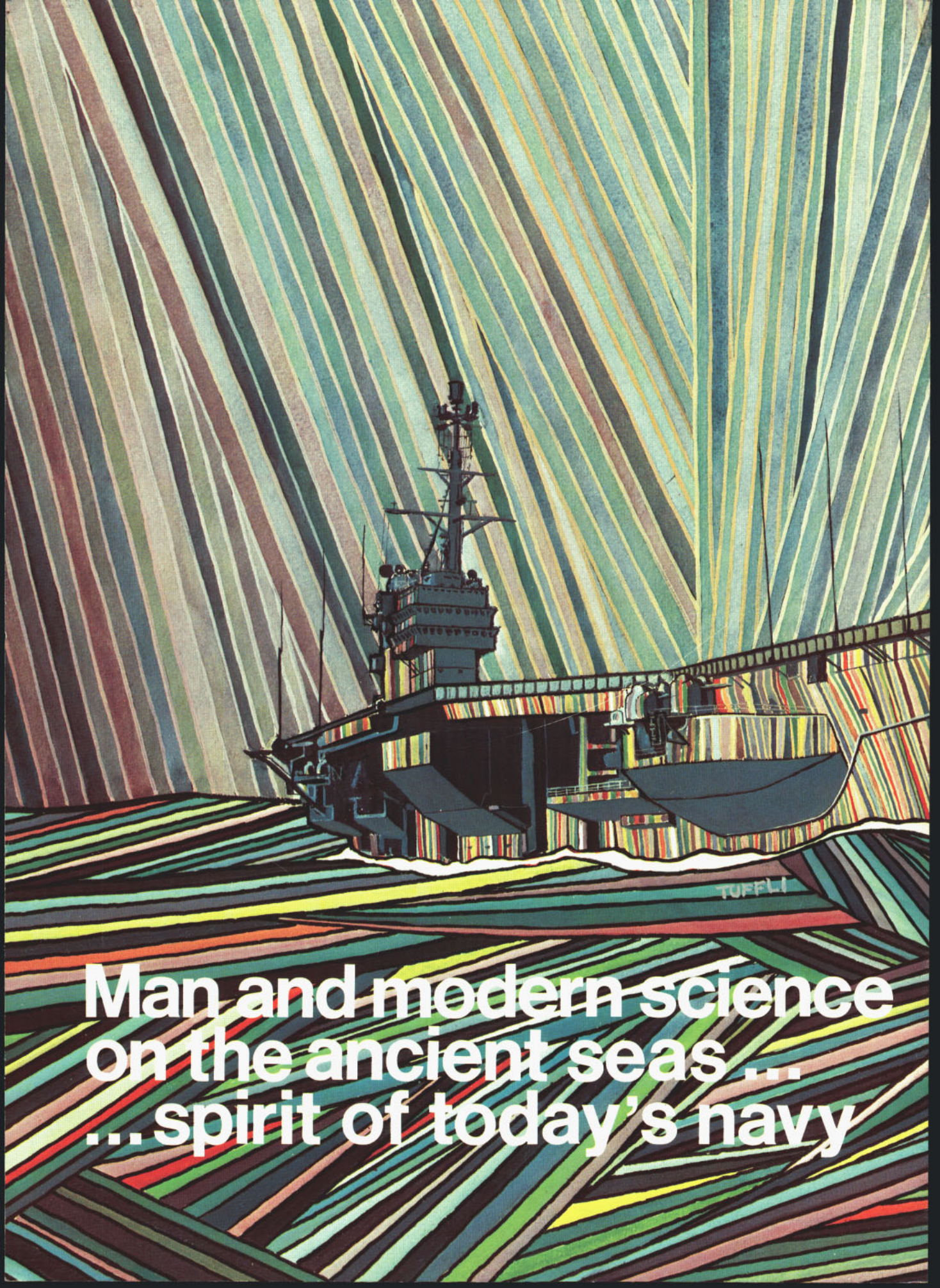
IC1 Jeremiah H. Paoli

"OK! Who's the wise guy who 'fooled Mother Nature' again?"

on the serious side

STG3 Michael E. DeStephano





Man and modern science on the ancient seas ... ...spirit of today's navy